



Rail Enhancement Fund
Project Application Form

Date: January 31, 2008

A. Name of Applicant (Name and Address)

Norfolk Southern Railway Company
Three Commercial Place
Norfolk, VA 23510

Applicant type:

- ☐ Passenger Railroad
☒ Freight Railroad
☐ Locality
☐ Business
☐ Other _____

B. Contact Information:

Responsible Person/Title: Bill Schafer, Director Strategic Planning

Telephone: 757-629-2894 Fax: 757-533-4884 Email: bill.schafer@nscorp.com

Project Manager/Title: Bill Schafer, Director Strategic Planning

Telephone: 757-629-2894 Fax: 757-533-4884 Email: bill.schafer@nscorp.com

C. Project Title: I-81 Crescent Corridor Initiatives

D. Project Location: (City/County, Rail line, Railroad Mile Post, attach map)

See Appendix 1 – Six-Year Improvement Plan Spread Sheet of Proposed I-81 Crescent Corridor Projects

E. Owner of Property/Right-of-Way/Facility/Personal Property:

Norfolk Southern Railway Company owns the mainline track rights-of-way, tunnels, bridges, and related appurtenances. NS or an affiliate will acquire any property required.

F. Responsible Part for Continuous Maintenance of Project:

Norfolk Southern Railway Company. This application is for capital costs only. NS will assume all ongoing maintenance and operating cost responsibilities and future capital costs.

G. Project Information:

- 1) Description of Project:
- 2) Project Objectives:

Overview of Norfolk Southern's I-81 Crescent Corridor Project

In 2007, Norfolk Southern (NS) announced the I-81 Crescent Corridor Project (see PowerPoint presentation, Appendix 2), an ambitious endeavor to develop premium rail intermodal service between the Northeast, the Southeast and the Southwest to attract domestic freight from paralleling interstate highways. While intermodal trains operate in this corridor today, they are few and their effect on the level of through truck traffic is minimal.

Following the success of the public-private funding that implemented the Heartland Corridor, NS conceived of the Crescent Corridor as another public-private partnership with significant potential to alleviate truck congestion on major interstate highways. The greatest benefit would be realized on Interstate 81, which runs the length of the Commonwealth of Virginia and which is the Nation's principal truck artery between the Northeast and the South.

NS estimates that the Crescent Corridor, when fully implemented, will cost between \$2 and 3 billion, and will divert over 1 million trucks per year by 2013. Most of these trucks would have traveled on Virginia highways for part of their journeys. NS must find public partners to make Crescent Corridor service a reality in six years – NS does not have the wherewithal to make the necessary improvements on its own in this time frame – and is grateful for Virginia's interest and support to date. NS is also seeking public partners at other states and at the federal level.

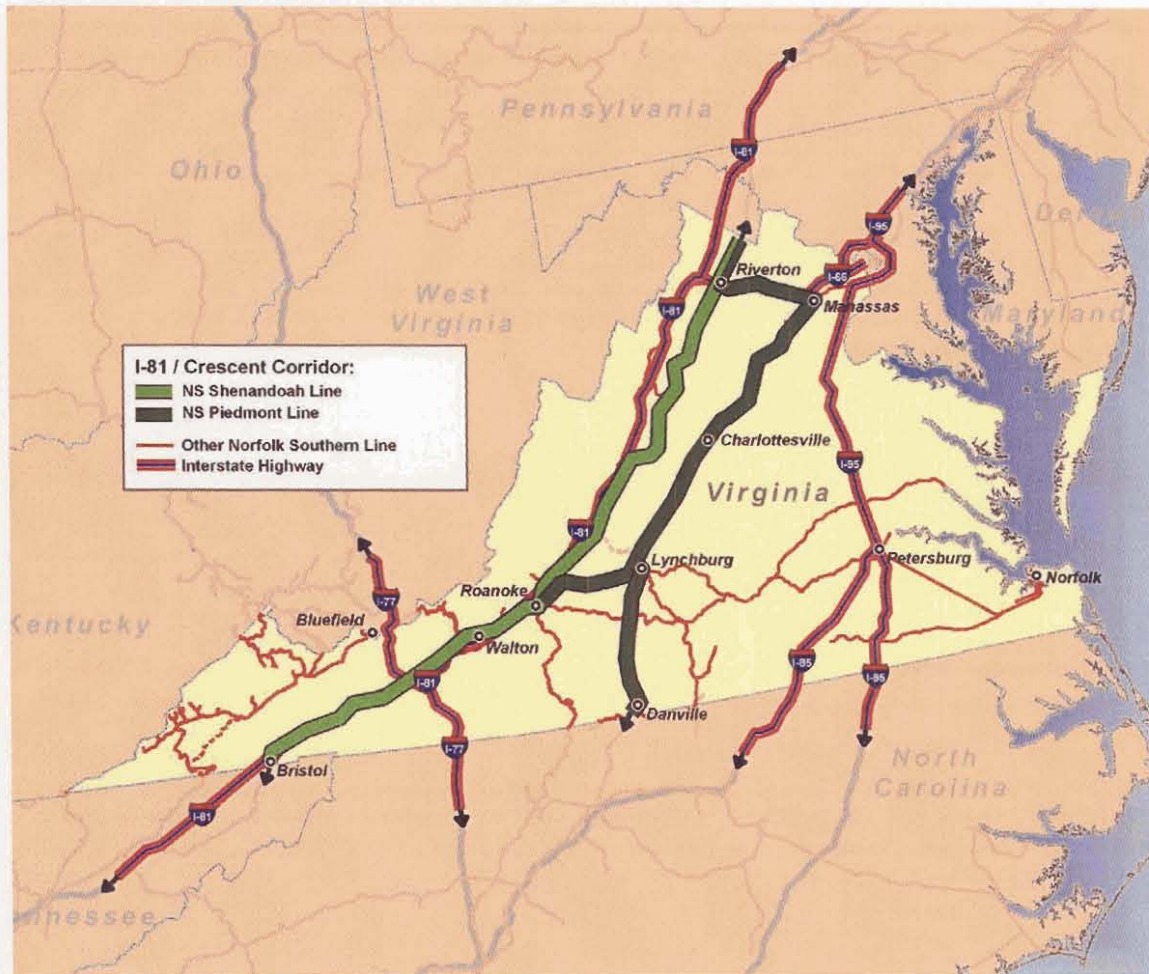
Overview of NS Routes in Virginia Needed for Crescent Corridor

NS realizes that the Crescent Corridor's enormous freight market has many originating and terminating points. Most of this freight is channeled through Virginia on I-81 and the additional intermodal trains NS proposes to operate as part of the Crescent Corridor will likewise be channeled through Virginia. Some of NS's routes can support additional trains with relatively little additional infrastructure. Other routes need significant upgrading before the potential of the Crescent Corridor can be realized.

Virginia and NS have already partnered to relieve the worst choke points on the Crescent Corridor with implementation of track and signal improvements between Manassas and Front Royal as described in NS's Project Application dated June 13, 2007 (and amended on August 24 and September 24). As a result of these improvements, NS will be able to expand the number of intermodal trains between the Northeast and most Southeastern/Southwestern markets. These trains also will be able to operate on improved schedules and with more reliability than at present, and are expected to attract about 600,000 trucks to Crescent Corridor trains over a fifteen year

period. While the volume of trucks may appear small compared to the millions of trucks the Crescent Corridor project is designed to divert, without the Manassas-Front Royal projects, the Crescent Corridor would not get off the ground. Many more Virginia projects must be completed before the Crescent Corridor can reach its potential, and this Application describes most of them.

Below is a map showing the NS routes that are part of the Crescent Corridor in Virginia:



Crescent Corridor trains will operate over the green lines shown on the map. The majority will utilize the Piedmont Route between Texas-Birmingham-Atlanta-Charlotte and the Northeast via Danville-Lynchburg-Manassas. About a third of the trains will utilize the Shenandoah Route between Northeast and Tennessee markets via Bristol-Roanoke-Riverton (Front Royal).

Piedmont/Shenandoah Route – WV State Line-Front Royal (H-Line)

NS's line between Front Royal and the West Virginia panhandle (H-Line) is the most critical choke point on the Crescent Corridor network (now that capacity is being added to the B-line between Manassas and Front Royal). This line is single track with

signaling and small (i.e. about a mile in length) passing tracks. All Crescent Corridor trains to and from the Northeast (20+ per day) will travel over this segment. Near-term upgrading needed: extended passing track at Berryville and improved connection between H-line and B-line at Riverton Junction (both projects are included in this Application for FY2009). The construction of a five-mile double track segment in the vicinity of the Virginia Inland Port is underway (part of 2007 Application; construction to begin subsequent to securing needed property). Longer term (2013+), at least one additional portion of double track will be needed on this line segment.

Piedmont Route – Riverton-Manassas (B-Line)

This line segment, presently the most critical choke point on the Crescent Corridor network, will lose this distinction after addition of four 11,000-foot passing tracks and installation of traffic control signaling in calendar year 2008. In addition to accommodating more freight trains, these improvements will also aid extension of VRE service to Haymarket, VA. The next improvements needed are those that will reduce running time. In addition to the improved connection between the B- and H-Lines at Riverton Junction (included in this Application for FY2009), modest modifications between mp B-1.0 and B-46.2 are needed to raise the maximum operating speeds of intermodal trains. Eventually (FY2011-2012 or thereabouts), more capacity will be needed on the B-line as the number of Crescent Corridor trains increases.

Piedmont Route – Manassas-Danville (SR Main)

Fortunately, capacity on NS's main line between Manassas and the NC state line south of Danville is not as constrained as on the B-line. The principal improvement needed in the near term (FY2010) is restoration of 10.5 miles of second main line track to connect two double track segments between Lynchburg and Danville, creating 33.5 miles of contiguous double track. Addition of this capacity will allow trains operating in both directions to pass with little or no delay. Further, the increased fluidity should reduce potential delay to Amtrak's *Crescent* in Virginia as well as to any future additional passenger trains between Lynchburg and Danville.

Piedmont Route – Lynchburg-Roanoke (PH-Line and N-Line)

In addition to being part of the Crescent Corridor, Lynchburg-Roanoke is also part of NS's Coal Corridor and Rt. 460-Heartland Corridor. Improvements needed on this line segment are listed in REF Applications for the Coal and Heartland Corridors. This route also has potential for passenger service to/from Roanoke and will require upgrading before passenger service can begin, particularly at Lynchburg and Roanoke. The most restricting condition is the connection between the SR Main and PH-Line at Lynchburg. An analysis of this connection is necessary to determine size and scope of improvements needed to keep passenger and freight service fluid and transparent to each other.

Shenandoah Route – Riverton (Front Royal)-Roanoke (H-Line)

In the 180 miles between Riverton and Roanoke, there are plenty of passing tracks – eighteen – but only three places where an 8000-foot train (proposed Crescent Corridor train length) can pass another 8000-foot train. The principal improvements needed are passing track lengthenings and places where running time can be reduced. In this application, NS proposes to extend two to four passing tracks on this line segment each year over the next six years. The Crescent Corridor trains with the most time-critical schedules are planned to operate via the Shenandoah Route and reduced running times are essential. Projects of significant cost that will enable higher maximum operating speeds for intermodal trains will be proposed in future REF applications.

Shenandoah Route – Roanoke-Bristol (N- and NB Lines)

The Crescent Corridor shares the line segment between Roanoke and Walton (N-Line) with the Coal and Heartland Corridors. In general, Roanoke-Walton has sufficient capacity for all three Corridors with minor exceptions – the second Montgomery Tunnel bore will need enlarging to accommodate double stack trains (mp N-285) and second main track should be restored between Walton and Bluff (N-297.3-N305.0) at some point (we propose FY2012 in this Application) to serve as a “queueing lane” to stage Heartland and Coal Corridor trains when conflicts with Crescent Corridor trains at Walton arise.

Walton-Bristol (NB-Line) shares characteristics with the H-Line between Riverton-Roanoke: short passing tracks and slow speeds. Three passing track extension/double track projects are proposed in this Application for FY2009, with additional projects proposed in subsequent years. In addition to allowing Crescent Corridor trains to pass each other, NB-Line improvements will reduce variability of train operations.

- 3) Relationship to Other Projects under Development by Applicant or Previously Funded by this Program:

See descriptions of FY2009 Projects in Appendix 3

- 4) Describe the Public Benefits of Project. Identify significant types of benefits and beneficiaries from this project. (See Attachment A).

See descriptions of FY2009 Projects in Appendix 3

- 5) Attachment A – Project Data Information Form – Must be completed by Applicant and submitted with this application.

See Attachment A

H. Type of Project:

- 1) ☐ New Construction ☐ Rehabilitation ☐ Study
- 2) ☐ Rail Infrastructure ☐ Rail Facility/Station
☐ Equipment/Rolling Stock ☐ Signals/Communication Equipment
- 3) Other _____

See descriptions of FY2009 Projects in Appendix 3

I. Application Scope of Work Covers:

☐ Entire Project ☐ A Phase of a Multi-Phase Project ☐ Completion Phase

See descriptions of FY2009 Projects in Appendix 3

J. Project Budget Summary:

| | |
|---|----------|
| Preliminary Service, Engineering, Or Feasibility Study | \$ _____ |
| Environmental Evaluation | _____ |
| Design Engineering | _____ |
| Right of Way Acquisition | _____ |
| Construction | _____ |
| Construction Management | _____ |
| Lease/Acquisition of Equipment | _____ |
| Public Involvement (if applicable) | _____ |
| Other _____ | _____ |
| Subtotal Project Budget | \$ _____ |
| Total Project Budget | \$ _____ |

See descriptions of FY2009 Projects in Appendix 3

K. Attach detailed budget and schedule information. If the project is for final design, construction or procurement; then plans, specifications and reports to a preliminary engineering level (approximately 30%) should be provided to support the project cost and major features (if applicable). A sample budget and schedule is included in Appendix D.

n/a

L. Rail Enhancement Funds Requested in this Application: \$41,467,362
Maximum 70% of Total Project Budget. Do not include any previous Allocations or future phases.

M. Local Match Required by Applicant: \$17,771,726
At least a minimum 30% of Total Project Budget

If Overmatch, Provide Percentage n/a

Match breakdown by Source (Including any in-kind match)

- a. Provider of Local Match – Norfolk Southern Railway Company
- b. Status (confirmed/anticipated) Confirmed
- c. Attach justification for value of in-kind match.

2) Other Funding Sources Beyond Match Requirement

- a. Provider of Overmatch: n/a
- b. Status (confirmed/anticipated) _____

N. Project implementation schedule (based in months). List major milestones of the project, including environmental review and public involvement points if applicable.

See descriptions of FY2009 Projects in Appendix 3

O. Statement of how this project promotes or does not preclude dual/multi-access use.

See descriptions of FY2009 Projects in Appendix 3

P. List additional users of rail line, facility, and/or equipment:

See descriptions of FY2009 Projects in Appendix 3

Q. Identify any possible environmental or other issues/concerns within the scope of this project.

See descriptions of FY2009 Projects in Appendix 3

Required Attachments:

Application is not complete without items 1-5 completed by the Applicant and submitted with the Application.

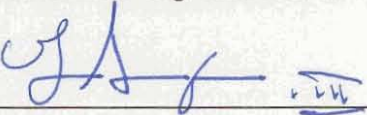
1. Attachment A – Project Data Information Form (provided)
2. Attachment B – Application Checklist (Provided)
3. Detailed cost, budget and schedule. Include preliminary engineering to 30% report, if applicable (Sample in Appendix D).
4. Certification of Match/% of Match/Documentation of Source of Match including Defined Match Source (To be provided by Applicant).
5. Certification of Additive Investment (To be provided by Applicant).

6. Statement from the Applicant/Owner of the facility that the SWAM participation goals will be achieved by the project.
7. Statement by the owner of the facility that acknowledges the Commonwealth will have a public interest in the facilities, materials, equipment and improvements funded or impacted by this project (To be provided by Applicant/Owner).

Application and Attachment Certification

To the best of my knowledge all information contained in this application and its attachments is true. The information provided to the Virginia Department of Rail and Public Transportation (DRPT) is subject to full disclosure except where protected by Virginia Code. Any additional documentation related to this application will be provided to DRPT upon request.

Authorized Signature and Title:



Date: January 31, 2008

George William Schafer, III
Director – Strategic Planning

One signed original, twelve copies, and an electronic copy in pdf format of the completed application and required documentation must be mailed under applicant cover to:

Director
Virginia Department of Rail and Public Transportation
1313 East Main Street, Suite 300
Richmond, Virginia 23219



Rail Enhancement Fund
Project Application Form

Internal Use

DRPT Tracking #

Attachment A
Project Data Information Form

Date: January 31, 2008

Name of Applicant and Project:

Norfolk Southern Railway Company – I-81 Crescent Corridor Initiatives

General Instructions: Please complete the following forms that apply to the project application.

- For Freight Service projects, complete forms A1, A2 and A5
- For Intercity/Amtrak passenger projects, complete forms A1, A3 and A5
- For Commuter/VRE passenger projects, complete forms A1, A4 and A5
- For projects that involve benefits to both freight and passenger projects, form A1 and forms A2-A4 that apply must be completed. For each completed form A2-A4, a form A5 must be completed for each category for projects resulting in multiple project benefits.

Terms:

Project Cost and Construction period: Form A1 shall be completed with total project cost by year of expenditure with total DRPT cost identified by year of expenditure. This section must be completed for all project applications.

Demand Characteristics: This category of information relates to the additional demand for rail service (including freight and passenger) due to the project. This additional demand must be over and above baseline conditions that currently exist. The specific data to enter here defines initial demand, steady state demand, and the years until steady state demand is achieved.

Steady State Demand: This term refers to the point at which the project benefits/demand have reached a long-term, sustainable level.

Project Impact on Travel Distance: This category of information includes the distance that would be traveled by vehicle or train. All distances should be limited to miles within Virginia. The distance should relate directly to the project-impacted area.

Demand Characteristics for a 15-year Performance Period: This term refers to the project output by performance year, which will be utilized to determine that public benefits and to determine the performance requirements over the 15-year Performance Period of the Grant Agreement.

Attachment A
Form A1 – Project Cost and Construction Period

First Construction Year: Calendar Year 2008

Last Construction Year: Calendar Year 2009

| Year | Total Project COST | Total DRPT COST |
|--------------|---------------------|---------------------|
| Year 1 | \$29,619,544 | \$20,733,681 |
| Year 2 | \$29,619,544 | \$20,733,681 |
| Year 3 | | |
| Year 4 | | |
| Year 5 | | |
| Total | \$59,239,088 | \$41,467,362 |

Note: Assume that preponderance (if not all) of work will be performed and billed in Virginia FY2009

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

Attachment A
Form A2 – Freight Service

| Demand Characteristics | CATEGORY | UNITS | VALUE |
|------------------------|--|--|-------|
| | Steady state demand – diversion of freight to rail (from trucks) | 319,756 Intermodal Units/Year - 2008 | |
| | First year of diversion 2009 | 44,076 IM Units/Year (average over 15 yrs) | |
| | Number of years until steady state – beyond forecast period | More than 15 | |

| Project impact on Travel Distance | CATEGORY | UNITS | VALUE |
|-----------------------------------|---|---|-------|
| | Rail miles in Virginia (Existing routing before project) | 658 Miles | |
| | Rail miles in Virginia (routing after project completion) | 658 Miles | |
| | Number of years until steady state | Already There (been there for a while) Number of Years | |

| Conversions | CATEGORY | UNITS | VALUE |
|-------------|-----------------------|---------------------|-------|
| | Railcars per Train | 100 Railcars/Trains | |
| | Rail tons per Railcar | 50 Tons/Railcar | |
| | Trucks per Railcar | 1.7 Trucks/Railcar | |

| Other | CATEGORY | UNITS | VALUE |
|-------|--|--|-------|
| | Change in Daily Delay for Freight Trains | 45 hours for 20 trains Railcars/Trains | |
| | Reduction in Number of Rail At-Grade Crossings | No reduction; just less time occupying some crossings due to higher speeds Tons/Railcar | |

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

Attachment A
Form A3 – Passenger Service – Intercity/Amtrak

| Demand Characteristics | CATEGORY | UNITS | VALUE |
|------------------------|--|-----------------|-------|
| | Annual Amtrak passengers (existing) | Passengers/Year | |
| | Steady State Demand – Additional Amtrak Passengers | Passengers/Year | |
| | First Year Number of Additional Passengers | Passengers/Year | |
| | Number of Years Until Steady State | Number of Years | |

| Project Impact on Travel Distance & Time | CATEGORY | UNITS | VALUE |
|--|---|---------|-------|
| | Amtrak Passenger Trip Length (existing) | Miles | |
| | Amtrak Passenger Trip Length (After Project Completion) | Miles | |
| | Amtrak Travel Time Per Trip (existing) | Minutes | |
| | Amtrak Travel Time Per Trip (After Project Completion) | Minutes | |

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

Attachment A
Form A4 – Passenger Service – Commuter/VRE

| Demand Characteristics | CATEGORY | UNITS | VALUE |
|------------------------|---|-----------------|-------|
| | Annual VRE passengers (existing) | Passengers/Year | |
| | Steady State Demand – Additional VRE Passengers | Passengers/Year | |
| | First Year Number of Additional Passengers | Passengers/Year | |
| | Number of Years Until Steady State | Number of Years | |

| Project Impact on Travel Distance & Time | CATEGORY | UNITS | VALUE |
|--|--|---------|-------|
| | VRE Passenger Trip Length (existing) | Miles | |
| | VRE Passenger Trip Length (After Project Completion) | Miles | |
| | VRE Travel Time Per Trip (existing) | Minutes | |
| | VRE Travel Time Per Trip (After Project Completion) | Minutes | |

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

Attachment A
Form A5– Demand Characteristics for 15-Year Performance Period

| Performance Year | Performance Value * |
|------------------|---------------------|
| 1 | 2894 |
| 2 | 6717 |
| 3 | 11781 |
| 4 | 15798 |
| 5 | 20183 |
| 6 | 31321 |
| 7 | 35740 |
| 8 | 40148 |
| 9 | 44564 |
| 10 | 61234 |
| 11 | 66754 |
| 12 | 72271 |
| 13 | 77792 |
| 14 | 83302 |
| 15 | 90642 |
| Total | 662460 |

For Freight Service Projects – car loads or containers per year
For Inter-City/Amtrak Passenger Projects – passengers per year
For Commuter/VRE Passenger Projects – passengers per year



Rail Enhancement Fund
Project Application Checklist
Attachment B

Internal Use

DRPT Tracking #

Date: January 31, 2008

Name of Applicant and Project:
Norfolk Southern Railway Company - I-81 Crescent Corridor Initiatives

Checklist for Application:

1. Project is consistent with goals of applicable adopted state, regional and/or local plans.
☒ YES ☐ NO
2. Project is an Additive Investment to Virginia.
☒ YES ☐ NO
3. Project provides for, or does not preclude, shared or dual access opportunity.
☒ YES ☐ NO
4. Applicant has provided documentation and certification of at least a minimum 30% match.
☒ YES ☐ NO
5. Applicant has provided an environmental review plan and/or public involvement plan, if applicable, and required budget for this activity as outlined in Appendix D.
☐ YES ☐ NO
6. Application is complete, including signature and specified number of hard copies and an electronic (pdf file) copy; and Applicant has reviewed the Standard Agreement as provided in Appendix C.
☒ YES ☐ NO

Attachment B

Measures for Public Benefit/Cost Analysis

- Congestion Relief
- Environmental Improvements
- Reduced Crash and Accident Cost
- Reduction in Cars and Trucks on Highway
- Added Capacity
- Fuel/Pollution Savings
- Carbon Equivalent

Attachment C

CERTIFICATION OF MATCH

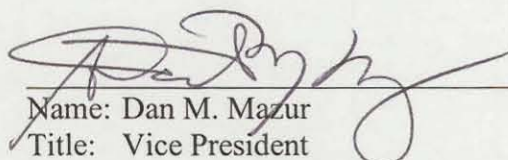
Norfolk Southern Railway Company ("Norfolk Southern") has applied to the Commonwealth of Virginia for Rail Enhancement Funds in FY2009 in the amount of \$59,239,088 in connection with ten projects designed to increase capacity and to decrease running time on portions of Norfolk Southern's I-81 Crescent Corridor in Virginia. As described in greater detail in Norfolk Southern's application, these projects will:

- Provide a higher-speed connecting track at Riverton Junction for trains operating between Norfolk Southern's Piedmont Line and the Northeast
- Improve track geometry on the B-Line to reduce intermodal train running time to become more truck-competitive
- Extend passing tracks or double track to enable longer trains to meet or pass other trains of similar length

As part of this application, Norfolk Southern hereby certifies that it will provide a local match equivalent to thirty percent (30%) of the estimated total project cost for which Rail Enhancement Funds are made available, or \$17,771,726. This match will be provided entirely by Norfolk Southern or one or more parents, subsidiaries or affiliates of Norfolk Southern.

NORFOLK SOUTHERN RAILWAY COMPANY

By:


Name: Dan M. Mazur
Title: Vice President

Attachment D

Mr. Matthew Tucker
Executive Director
Virginia Department of Rail and Public Transportation
1313 East Main Street, Suite 300
P. O. Box 590
Richmond, VA 23218-0590

Subject: **Certification of Additive Investment**

Dear Mr. Tucker:

This letter certifies that the Virginia Funds requested in the accompanying application will add to the state's rail infrastructure and will not be used to replace funds that would have otherwise been spent in the Commonwealth.

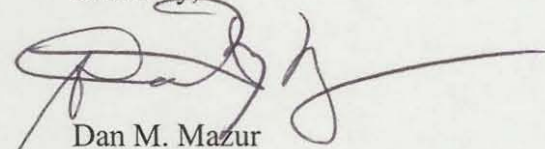
Norfolk Southern Railway Company's application requests funds for FY2009 for infrastructure projects on the I-81 Crescent Corridor that will:

- Provide a higher-speed connecting track at Riverton Junction for trains operating between Norfolk Southern's Piedmont Line and the Northeast
- Improve track geometry on the B-Line to reduce intermodal train running time to become more truck-competitive
- Extend passing tracks or double track to enable longer trains to meet or pass other trains of similar length

Although Norfolk Southern foresees traffic growth on the I-81 Crescent Corridor, internal funds will not be available to undertake all of the needed improvements for some years to come. Without Virginia Funds, these projects will not be built until there are significant changes in traffic flows, which would delay the benefits made possible by the operation of premium intermodal service.

In sum, Norfolk Southern certifies that the Virginia Funds requested in its application will be used as part of a public-private partnership for improvements that NS would not undertake alone at this time.

Sincerely,



Dan M. Mazur
Vice President

Attachment E

Statement of Public Interest

Name of Applicant and Projects:

Norfolk Southern Railway Company

| Project Name | Location | Milepost Limits |
|--------------------------------------|-------------------|-------------------|
| Riverton Junction Improvements | Riverton, VA | H55 and B51 |
| Speed Improvements - Curves | Manassas-Riverton | B1.0 – B46.2 |
| Berryville Passing Track Extension | Berryville, VA | H37.6 – H39.8 |
| Solitude Passing Track Extension | Solitude, VA | H206.1 – H208.2 |
| Wytheville Passing Track Extension | Wytheville, VA | NB336.2 – NB339.6 |
| Lithia Passing Track Extension | Lithia, VA | H216.9 – H219.3 |
| Glade Spring Passing Track Extension | Glade Spring, VA | NB380.4 – NB382.9 |
| Sampson Passing Track Extension | Sampson, VA | H135.0 – H137.2 |
| Walton-Plum Creek Double Track | Walton, VA | N297.6 – NB299.0 |
| Bentonville Passing Track Extension | Bentonville, VA | H72.1 – H74.2 |

Statement from the owner of the facilities that acknowledges the Commonwealth will have a Public Interest in Private Facilities impacted by these projects.

To Whom It May Concern:

At the appropriate time, Norfolk Southern will enter into an agreement to be negotiated with the Commonwealth of Virginia to protect the Commonwealth's public interest in the projects listed in the table above.

NORFOLK SOUTHERN RAILWAY COMPANY

By:


Name: Daniel M. Mazur
Title: Vice President
Date:

Attachment F

Statement of SWAM Participation

Name of Applicant and Projects:

Norfolk Southern Railway Company

| Project Name | Location | Milepost Limits |
|--------------------------------------|-------------------|-------------------|
| Riverton Junction Improvements | Riverton, VA | H55 and B51 |
| Speed Improvements – Curves | Manassas-Riverton | B1.0 – B46.2 |
| Berryville Passing Track Extension | Berryville, VA | H37.6 – H39.8 |
| Solitude Passing Track Extension | Solitude, VA | H206.1 – H208.2 |
| Wytheville Passing Track Extension | Wytheville, VA | NB336.2 – NB339.6 |
| Lithia Passing Track Extension | Lithia, VA | H216.9 – H219.3 |
| Glade Spring Passing Track Extension | Glade Spring, VA | NB380.4 – NB382.9 |
| Sampson Passing Track Extension | Sampson, VA | H135.0 – H137.2 |
| Walton-Plum Creek Double Track | Walton, VA | N297.6 – NB299.0 |
| Bentonville Passing Track Extension | Bentonville, VA | H72.1 – H74.2 |

January 31, 2008

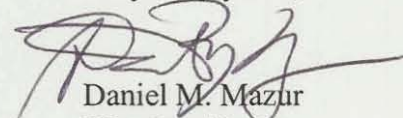
To Whom It May Concern:

In connection with Norfolk Southern Railway Company's Rail Enhancement Fund Application for the the projects listed in the table above, please accept this letter as the applicant's statement regarding small, women- and minority-owned business (SWAM) participation goals.

For project work that is not performed by Norfolk Southern's workforce, Norfolk Southern will undertake reasonable and good faith efforts to achieve the SWAM participation goal for the project through race-neutral and gender-neutral means that are lawful and non-discriminatory. We understand the project participation goal to be forty percent (40%) of the total value of contracts between Norfolk Southern and third parties for the performance of the project work. The success of Norfolk Southern's efforts will of course be impacted by the availability of qualified and willing small businesses and women- and minority-owned businesses within the market area of the project.

Thank you for considering Norfolk Southern's application.

Very truly yours,



Daniel M. Mazur
Vice President

List of Appendices

Appendix 1

Master Spread Sheet showing proposed I-81 Crescent Corridor projects, 2009-2014

Appendix 2

I-81 Crescent Corridor Presentation – November 7, 2007 to Commonwealth Transportation Board

Appendix 3

Description of FY2009 Projects (in priority order)

- Riverton Junction Improvements
- Manassas-Riverton Junction, Running Time Improvements
- Berryville Passing Track Extension
- Solitude Passing Track Extension
- Wytheville Passing Track Extension
- Lithia Passing Track Extension
- Glade Spring Passing Track Extension
- Sampson Passing Track Extension
- Walton-Plum Creek Double Track Construction
- Bentonville Passing Track Extension

Appendix 1

Norfolk Southern Railway

Proposed REF Projects 2008-2013 - I-81 Crescent Corridor

| Project Location and Name | | | | | | | | | | Project Information | | Project Budget Summary | REF \$ Requested | Local Match Required of Applicant | Remarks | |
|---------------------------|----------|--|--------|---------|---------------------|---|--|---|--|---------------------|-------------|------------------------|------------------|-----------------------------------|------------|--|
| Rank | Corridor | City/County or Corp Lmts | Year | Line | MP Limits | Project Name | | Description (Brief) | | | | | | | | |
| 1 | Crescent | Riverton/Warren County | FY2009 | H & B | H59.8 - B51 | Riverton Junction Improvements | | Modify connecting track between B- and H-lines | | \$ | 7,000,000 | \$ | 4,000,000 | \$ | 2,100,000 | |
| 2 | Crescent | Manassas-Riverton/Prince William-Fauquier-Warren | FY2009 | B | B1.0 - B48.2 | Running Time Improvements | | Modify curves to sustain higher intermodal speeds | | \$ | 800,000 | \$ | 500,000 | \$ | 240,000 | |
| 3 | Crescent | Bennville/Clarke County | FY2009 | H | H-37.6 - H-39.8 | Bennville Passing Track Extension | | Extend existing passing track to 11,000' | | \$ | 4,620,000 | \$ | 3,238,000 | \$ | 1,386,000 | |
| 4 | Crescent | Solitude/Botetourt | FY2009 | H | H-206.1 - H-208.2 | Solitude Passing Track Extension | | Extend existing passing track to 11,000' | | \$ | 5,079,488 | \$ | 3,555,642 | \$ | 1,523,846 | |
| 5 | Crescent | Wytheville/Wythe & Wytheville Corp | FY2009 | NB | NB-336.2 - NB-339.6 | Wytheville Passing Track Extension | | Extend existing passing track to 18,000' | | \$ | 9,255,448 | \$ | 6,478,814 | \$ | 2,776,634 | |
| 6 | Crescent | Lithia/Botetourt | FY2009 | H | H-216.9 - H-219.3 | Lithia Passing Track Extension | | Extend existing passing track to 12,500' | | \$ | 6,637,673 | \$ | 4,646,371 | \$ | 1,991,302 | |
| 7 | Crescent | Glade Spring/Washington & Glade Spring Corp | FY2009 | NB | NB-360.4 - NB-362.9 | Glade Spring Passing Track Extension | | Extend existing passing track to 13,000' | | \$ | 6,724,858 | \$ | 4,707,401 | \$ | 2,017,457 | |
| 8 | Crescent | Sampson/Augusta | FY2009 | H | H-135.0 - H-137.2 | Sampson Passing Track Extension | | Extend existing passing track to 11,600' | | \$ | 6,767,726 | \$ | 4,737,408 | \$ | 2,030,318 | |
| 9 | Crescent | Walton/Montgomery | FY2009 | N & NB | N-207.6 - NB-209.0 | Walton-Plum Creek Double Track Construction | | Construct 7400' double track connecting N-line with Radford passing track | | \$ | 7,378,495 | \$ | 5,184,947 | \$ | 2,213,549 | Total length of double track including existing double track at Radford: 4.5 miles |
| 10 | Crescent | Bennville/Warren | FY2009 | H | H-72.1 - H-74.2 | Bennville Passing Track Extension | | Extend existing passing track to 11,000' | | \$ | 4,975,400 | \$ | 3,462,780 | \$ | 1,492,620 | |
| | | | | | | | | | | \$ | 59,239,088 | \$ | 41,467,382 | \$ | 17,771,726 | |
| | | | | | | | | | | | | | | | | |
| | Crescent | Midvale/Rockbridge | FY2010 | H | H-174.9 - H-177.0 | Midvale Passing Track Extension | | Extend existing passing track to 11,000' | | \$ | 8,000,000 | \$ | 5,600,000 | \$ | 2,400,000 | |
| | Crescent | Crockett/Wythe | FY2010 | NB | NB-345.8 - NB-347.9 | Crockett Passing Track Extension | | Extend existing passing track to 11,000' | | \$ | 8,000,000 | \$ | 5,600,000 | \$ | 2,400,000 | |
| | Crescent | Seven Mile Ford/Smyth | FY2010 | NB | NB-365.4 - NB-370.6 | Marion-Seven Mile Ford Double Track | | Construct 5.6 mi. double track | | \$ | 41,000,000 | \$ | 28,700,000 | \$ | 12,300,000 | |
| | Crescent | Blairsville/Georgia | FY2010 | SR Main | 221.9 - 232.5 | White-Fall Double Track | | Restore 10.6 mi. second main connecting two dbl trk segments; add double crossovers | | \$ | 57,000,000 | \$ | 39,800,000 | \$ | 17,100,000 | |
| | Crescent | Trouville/Botetourt & Trouville Corp | FY2010 | H | H-225.9 - H-228.1 | Trouville Passing Track Extension | | Extend existing passing track to 11,600' | | \$ | 7,000,000 | \$ | 4,000,000 | \$ | 2,100,000 | |
| | Crescent | Nokesville/Prince William | FY2010 | SR Main | 36.5 - 38.9 | Nokesville Block Swap Track | | Construct 2.4 mi. block swap track | | \$ | 5,000,000 | \$ | 6,300,000 | \$ | 2,700,000 | |
| | | | | | | | | | | \$ | 130,600,000 | \$ | 91,060,000 | \$ | 39,600,000 | |
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| | Crescent | Manassas/Prince William Co | FY2011 | B | B-1.0 - B-8.0 | Gaineville-Manassas Double Track | | Create 7 mi. double track incorporating Gaineville Passing Trk; add double crossovers | | \$ | 40,000,000 | \$ | 28,000,000 | \$ | 12,000,000 | Coordinate with VRE extension |
| | Crescent | Broad Run/Fauquier | FY2011 | B | B-16.4 - B-18.3 | Broad Run Passing Track | | Construct new 14,400' passing track | | \$ | 11,000,000 | \$ | 7,700,000 | \$ | 3,300,000 | |
| | Crescent | Reclotown/Fauquier | FY2011 | B | B-26.4 - B-28.9 | Reclotown Passing Track | | Construct new 13,200' passing track | | \$ | 13,000,000 | \$ | 9,100,000 | \$ | 3,900,000 | |
| | Crescent | Lynnwood/Rockingham | FY2011 | H | H-123.4 - H-125.5 | Lynnwood Passing Track Extension | | Extend existing passing track to 11,000' | | \$ | 11,000,000 | \$ | 7,700,000 | \$ | 3,300,000 | |
| | Crescent | Staarts Draft/Augusta | FY2011 | H | H-150.6 - H-152.9 | Staarts Draft Passing Track Extension | | Extend existing passing track to 11,000' | | \$ | 7,000,000 | \$ | 4,000,000 | \$ | 2,100,000 | |
| | Crescent | Glaspoe/Rockbridge & Glaspoe Corp | FY2011 | H | H-103.3 - H-105.4 | Glaspoe Passing Track Extension | | Extend existing passing track to 11,000' | | \$ | 7,000,000 | \$ | 4,000,000 | \$ | 2,100,000 | |
| | Crescent | Guntion Park/Pulaski & Wythe | FY2011 | NB | NB-322.1 - NB-324.2 | Guntion Park Passing Track Extension | | Extend existing passing track to 11,000' | | \$ | 7,000,000 | \$ | 4,000,000 | \$ | 2,100,000 | |
| | Crescent | Wyndale/Washington | FY2011 | NB | NB-397.2 - NB-399.5 | Wyndale Passing Track Construction | | Construct new 12,000' passing track | | \$ | 12,000,000 | \$ | 8,400,000 | \$ | 3,600,000 | |
| | | | | | | | | | | \$ | 108,000,000 | \$ | 75,600,000 | \$ | 32,400,000 | |
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| | Crescent | Linden-Riverton/Fauquier-Warren | FY2012 | B | B-43.2 - B-50.8 | Linden-Riverton Double Track | | Create 7.6 mi. double track incorporating Whitcomb Passing Trk | | \$ | 30,000,000 | \$ | 21,000,000 | \$ | 9,000,000 | |
| | Crescent | Front Royal/Front Royal Corp | FY2012 | H | H-59.2 - H-61.9 | Front Royal Passing Track Extension | | Extend existing passing track to 14,000' | | \$ | 20,000,000 | \$ | 20,300,000 | \$ | 8,700,000 | |
| | Crescent | Vaughn/Pace | FY2012 | H | H-81.4 - H-83.7 | Vaughn Passing Track Extension | | Extend existing passing track to 12,000' | | \$ | 8,000,000 | \$ | 5,600,000 | \$ | 2,400,000 | |
| | Crescent | Stanley/Pace & Stanley Corp | FY2012 | H | H-93.4 - H-95.5 | Stanley Passing Track Extension | | Extend existing passing track to 12,000' | | \$ | 8,000,000 | \$ | 5,600,000 | \$ | 2,400,000 | |
| | Crescent | Walton/Montgomery | FY2012 | N | N-297.3 - N-305.0 | Walton-Bluff Double Track Construction | | Construct 3.6 mi. double track | | \$ | 30,000,000 | \$ | 21,000,000 | \$ | 9,000,000 | |
| | Crescent | Orange-Weyburn/Orange | FY2013 | SR Main | 84.6 - 92.1 | Orange-Weyburn Double Track | | Restore 7.5 mi. second main connecting two dbl trk segments; add double crossovers | | \$ | 35,000,000 | \$ | 24,500,000 | \$ | 10,500,000 | |
| | | | | | | | | | | \$ | 140,000,000 | \$ | 98,000,000 | \$ | 42,000,000 | |
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| | | | | | | | | | | | | | | | | |
| | Crescent | Jefferson Co WV/Clarke Co | FY2013 | H | H28.4-H44.9 | Bennville Double Track | | Create 16.5 mi. double track incorporating Bennville Passing Trk | | \$ | 80,000,000 | \$ | 56,000,000 | \$ | 24,000,000 | |
| | Crescent | Remington-Culpeper/Fauquier-Culpeper | FY2013 | SR Main | 56.0 - 65.9 | Remington-Culpeper Double Track | | Restore 9.9 mi. second main connecting two dbl trk segments; add double crossovers | | \$ | 77,000,000 | \$ | 53,800,000 | \$ | 23,100,000 | |
| | Crescent | Waynesboro/Augusta & Waynesboro Corp | FY2013 | H | H-140.7 - H-142.9 | Waynesboro Passing Track Extension | | Extend existing passing track to 11,000' | | \$ | 9,000,000 | \$ | 6,300,000 | \$ | 2,700,000 | |
| | Crescent | Cloverdale/Botetourt | FY2013 | H | H-230.0 - H-232.1 | Cloverdale Passing Track Extension | | Extend existing passing track to 11,000' | | \$ | 24,000,000 | \$ | 16,800,000 | \$ | 7,200,000 | |
| | Crescent | Rural Retreat Corp | FY2013 | NB | NB-345.9 - NB-350.7 | Crockett-Alfina Double Track Construction | | Construct 13.8 mi double track incorporating Crockett passing track | | \$ | 30,000,000 | \$ | 23,000,000 | \$ | 7,000,000 | |
| | | | | | | | | | | \$ | 280,000,000 | \$ | 196,000,000 | \$ | 84,000,000 | |
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| | Crescent | Winston-Rapidan/Culpeper | FY2014 | SR Main | 70.7 - 80.1 | Winston-Rapidan Double Track | | Restore 9.4 mi. second main connecting two dbl trk segments; add double crossovers | | \$ | 69,000,000 | \$ | 48,300,000 | \$ | 20,700,000 | |
| | Crescent | Elkton/Elkton Corp & Rockingham | FY2014 | H | H-112.8 - H-114.9 | Elkton Passing Track Construction | | Construct new 11,000' passing track | | \$ | 21,000,000 | \$ | 14,700,000 | \$ | 6,300,000 | |
| | Crescent | Buena Vista/Buena Vista Corp | FY2014 | H | H-164.5 - H-166.6 | Buena Vista Passing Track Extension | | Extend existing passing track to 11,000' | | \$ | 6,000,000 | \$ | 4,200,000 | \$ | 1,800,000 | |
| | Crescent | New Barn/Pulaski & Dublin Corp | FY2014 | NB | NB-309.2 - NB-312.8 | New Barn Passing Track Extension | | Extend existing passing track to 18,000' | | \$ | 20,000,000 | \$ | 14,000,000 | \$ | 6,000,000 | |
| | | | | | | | | | | \$ | 116,800,000 | \$ | 81,200,000 | \$ | 34,600,000 | |
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I-81 Crescent Corridor An Overview

Commonwealth Transportation Board
Roanoke, VA
November 7, 2007

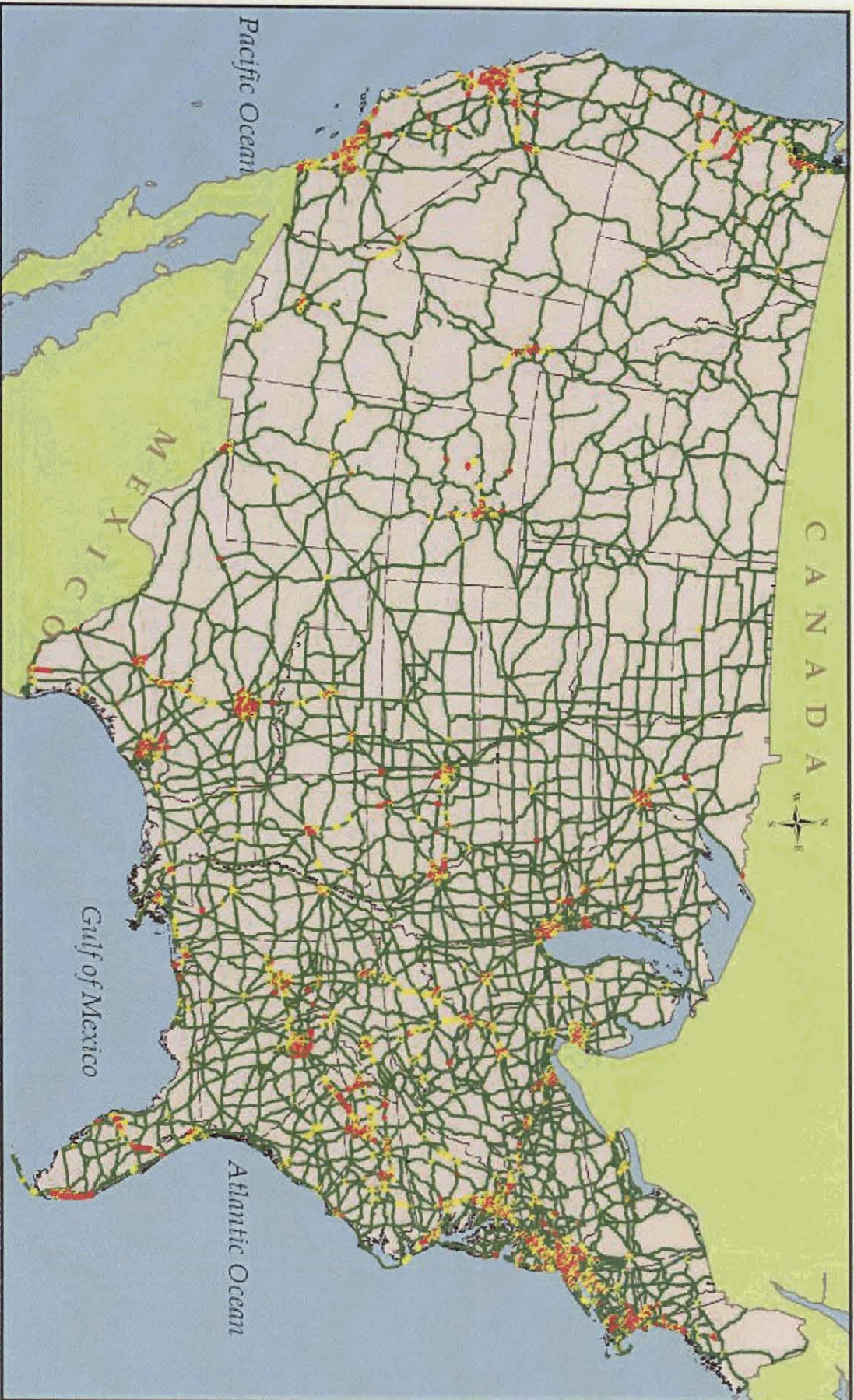
Norfolk Southern Corporation
Norfolk, Virginia



Agenda

- Why do we need a Crescent Corridor?
- Investment and Implementation
- Crescent, I-81 Study, and Virginia

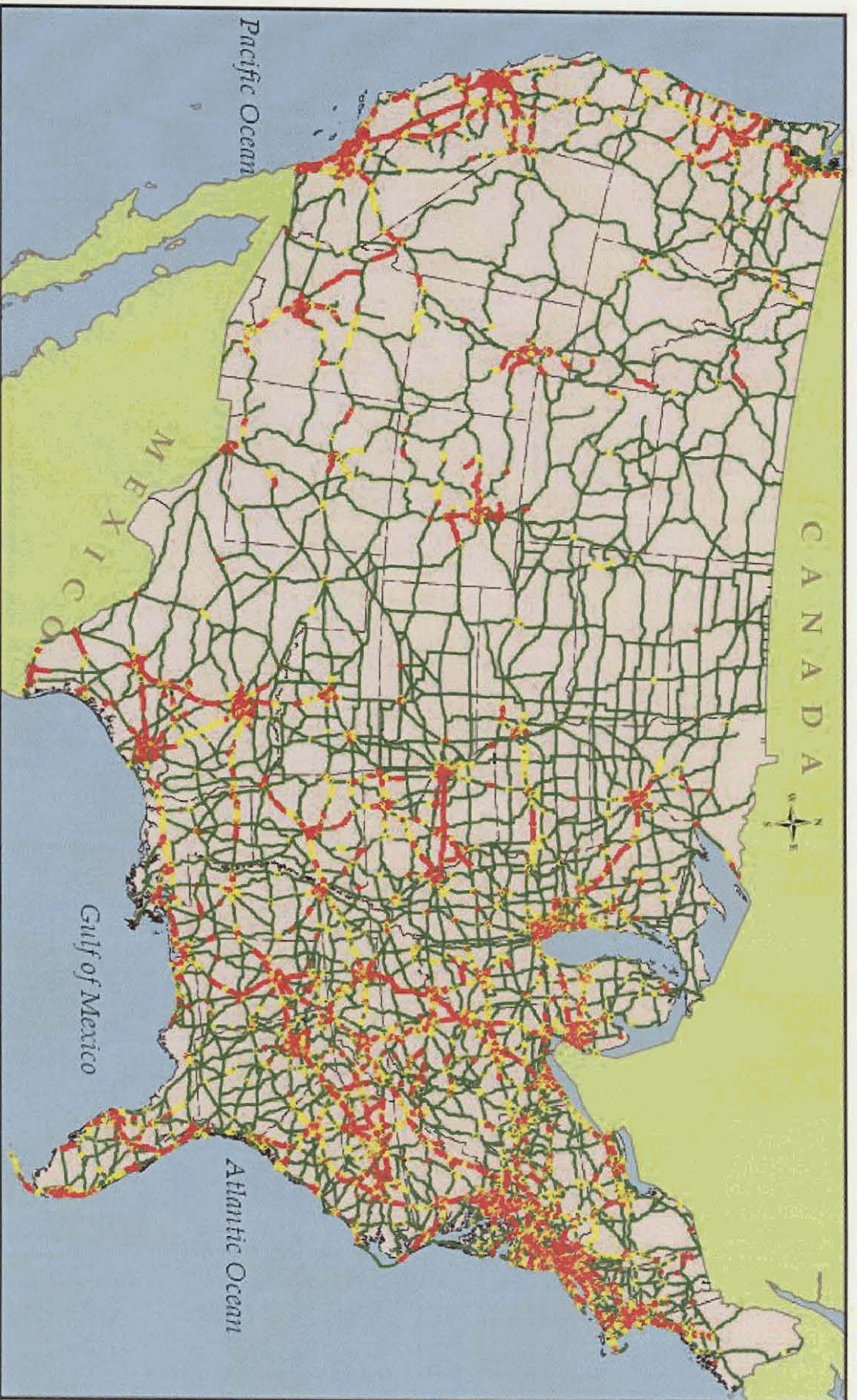





U.S. Department of Transportation
Federal Highway Administration
Office of Freight Management and Operations
Freight Analysis Framework

National Highway System Estimated Peak Period Congestion (1998)

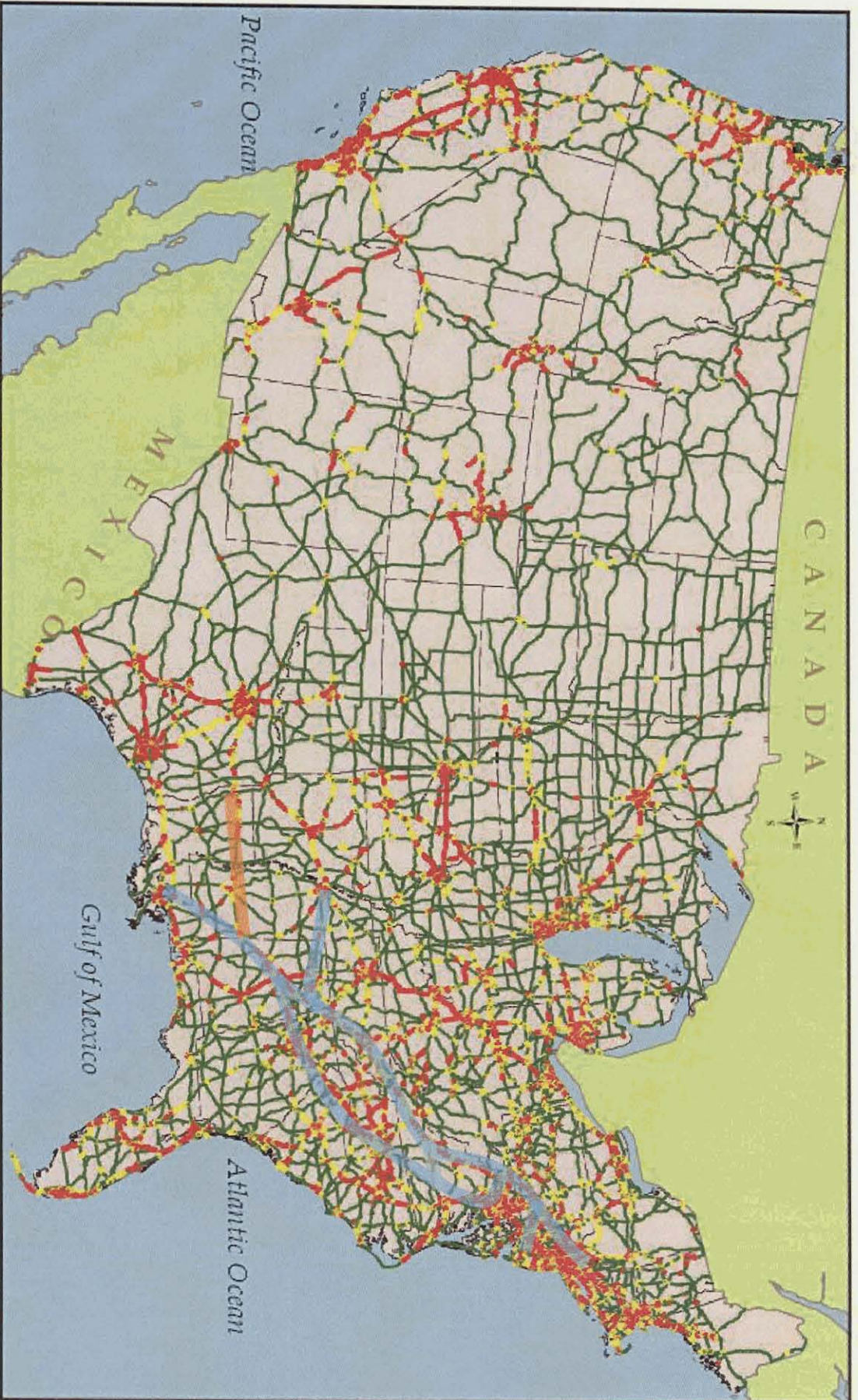
NHS Highways
 — Below Capacity
 — Approaching Capacity
 — Exceeding Capacity




 US Department of Transportation
 Federal Highway Administration
 Office of Freight Management and Operations
 Freight Analysis Framework

National Highway System Estimated Peak Period Congestion (2020)

NHS Highways
 Below Capacity
 Approaching Capacity
 Exceeding Capacity



US Department of Transportation
Federal Highway Administration
Office of Freight Management and Operations
Freight Analysis Framework

National Highway System Estimated Peak Period Congestion (2020)

Meridian Speedway I-81 Crescent Corridor

NHS Highways
Below Capacity
Approaching Capacity
Exceeding Capacity

A detailed map of the United States and parts of Canada, Mexico, and the Caribbean. The map shows state boundaries, major cities, and the Gulf of Mexico. The title "THE UNITED STATES" is prominently displayed in the center. The map is oriented with North at the top.

States and Territories shown:

- Alaska
- Arizona
- California
- Colorado
- Connecticut
- Delaware
- District of Columbia
- Florida
- Georgia
- Idaho
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Louisiana
- Maine
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Oregon
- Pennsylvania
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Vermont
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming

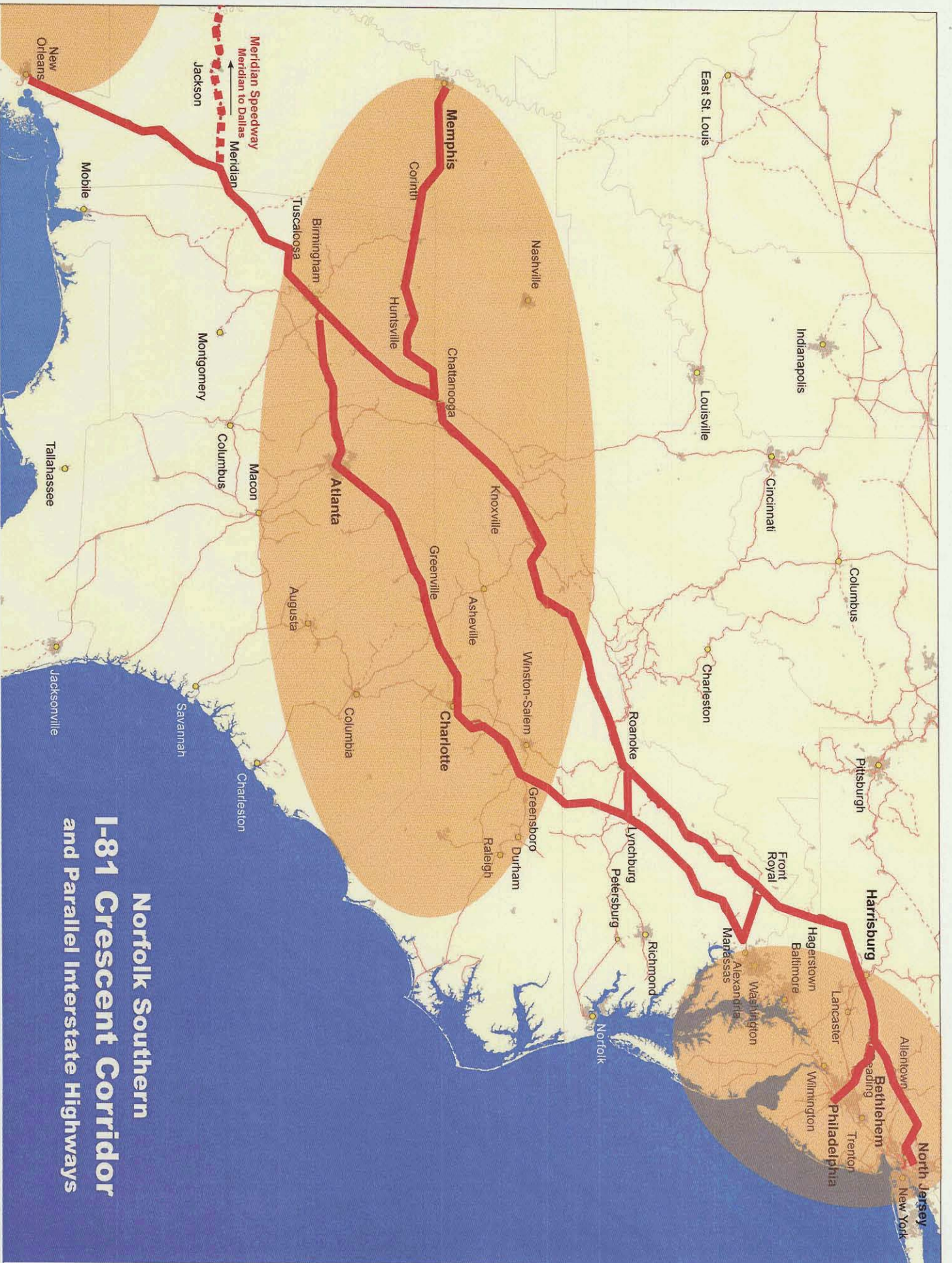
Major Cities and Towns shown:

- Albany
- Anchorage
- Atlanta
- Baltimore
- Boston
- Buffalo
- Butte
- Charlotte
- Chicago
- Cincinnati
- Cleveland
- Columbus
- Dallas
- Denver
- Des Moines
- Detroit
- El Paso
- Fort Worth
- Hartford
- Houston
- Indianapolis
- Jacksonville
- Jersey City
- Johnstown
- Los Angeles
- Madison
- Manila
- Memphis
- Meriden
- Minneapolis
- Mobile
- Montgomery
- Muskegon
- Nashville
- New Orleans
- New York
- Philadelphia
- Pittsburgh
- Portland
- Raleigh
- Richmond
- Rochester
- Salt Lake City
- San Antonio
- San Diego
- San Francisco
- Seattle
- Shanghai
- Sioux Falls
- Springfield
- St. Louis
- Tampa
- Tucson
- Tulsa
- Union City
- Wash. D.C.
- Washington
- Wichita
- Yonkers

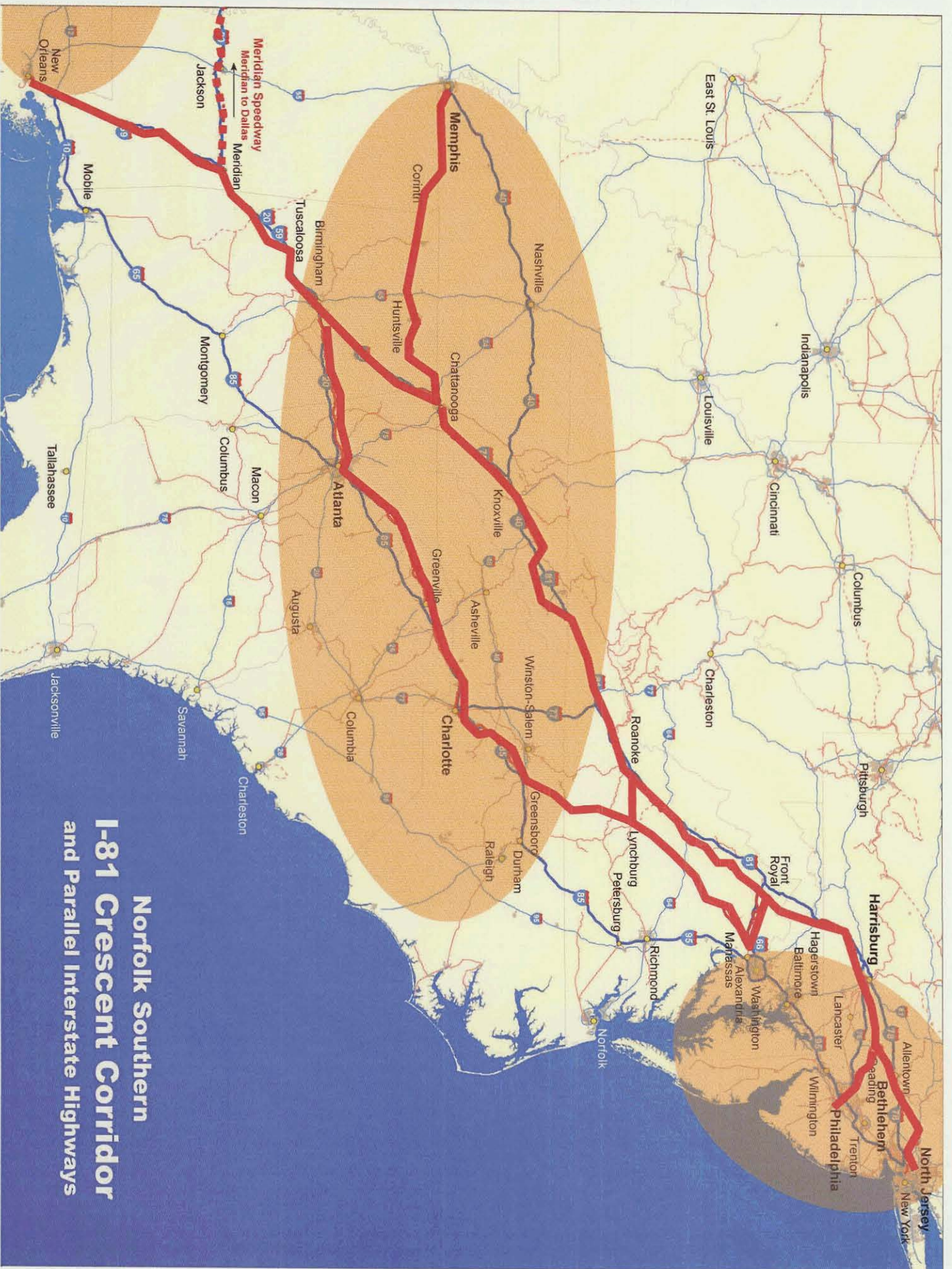
Other Labels:

- Gulf of Mexico
- Atlantic Ocean
- THE UNITED STATES
- THE BAHAMAS
- Canada
- Mexico
- Caribbean Sea





Norfolk Southern I-81 Crescent Corridor and Parallel Interstate Highways



**Norfolk Southern
I-81 Crescent Corridor
and Parallel Interstate Highways**

What drives the Crescent Corridor?

- Minimal existing intermodal service along the I-20, I-40, I-75, I-85 and I-81 corridors
- Significant and growing highway congestion
- More than 1 million divertible truckloads
- Truckers and shippers want alternatives



What makes Crescent different?

- Domestic freight
 - Originating and terminating in North America
 - Not intended to serve ports
- “Premium” service
 - Higher average speeds and reliability
 - Support from major trucking companies
- Network – up to 28 additional trains per day
- Competitive with single driver transit times



Crescent Corridor Progress and Timing

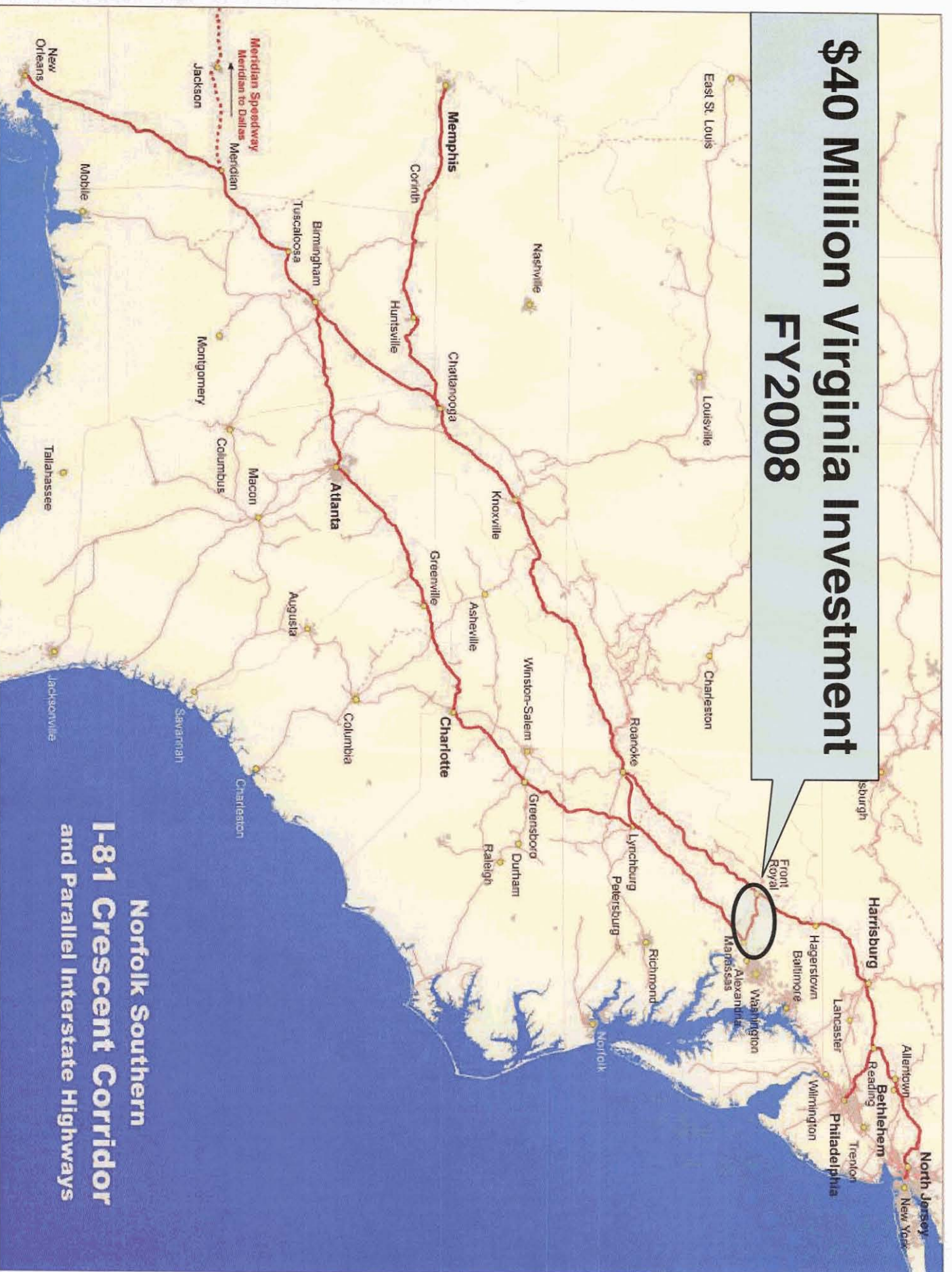
- **Cost:** TBD, but > \$2 billion total cost
- **Timing:** Phase in through 2013, as funding develops
- **Routes:** Planning, engineering and construction underway on improvements



Crescent Corridor – Imperative for Public Investment

- Safety
- Highway congestion mitigation
- Deferred/reduced highway maintenance expense
- Deferred/reduced highway expansion requirement
- Environmental benefits
 - Emissions
 - Land use
 - Fuel consumption
 - Lower impact on historical and cultural assets
- Economic Development

\$40 Million Virginia Investment FY2008

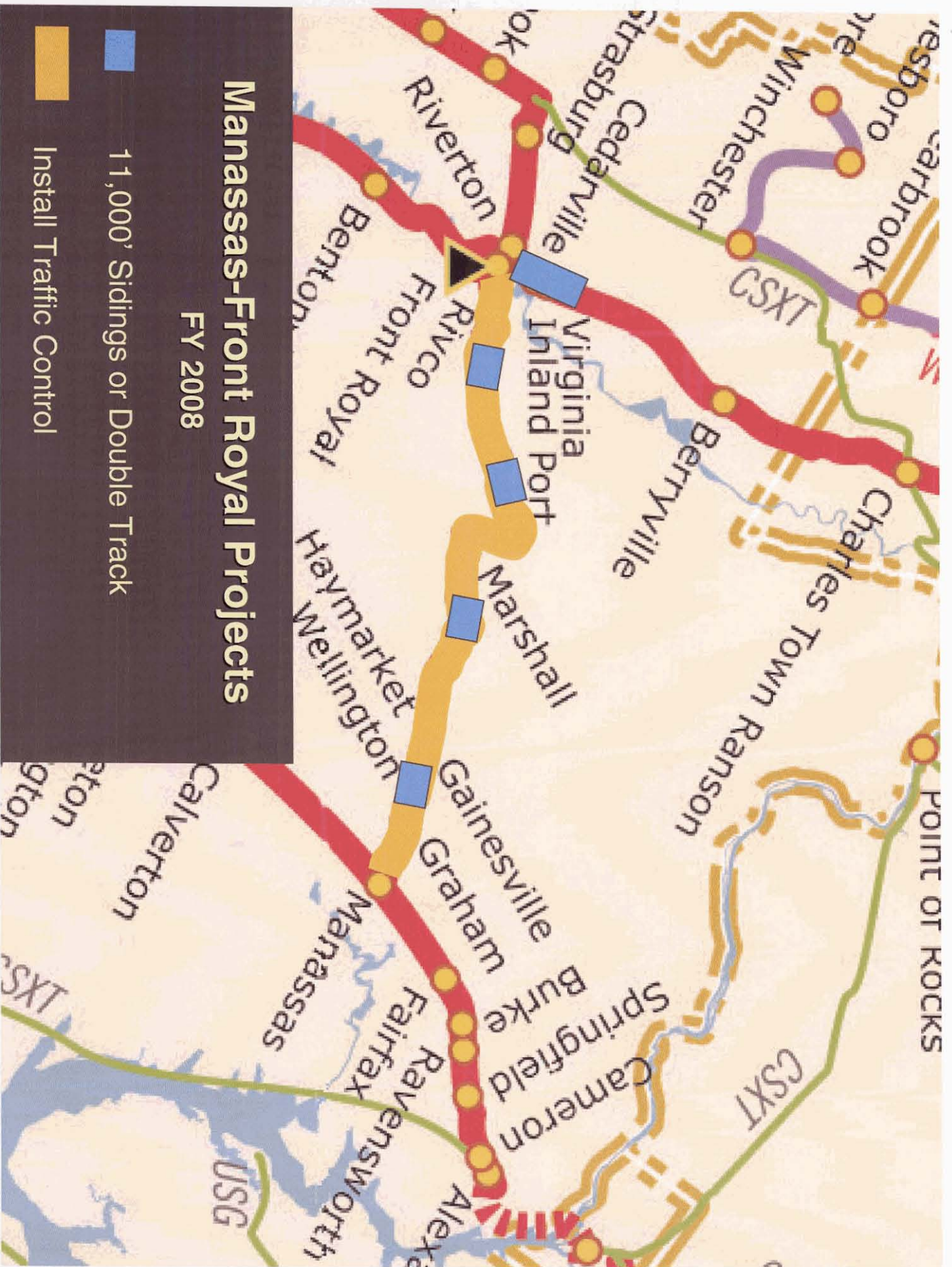


**Norfolk Southern
I-81 Crescent Corridor
and Parallel Interstate Highways**

\$40 Million Virginia Investment – FY2008

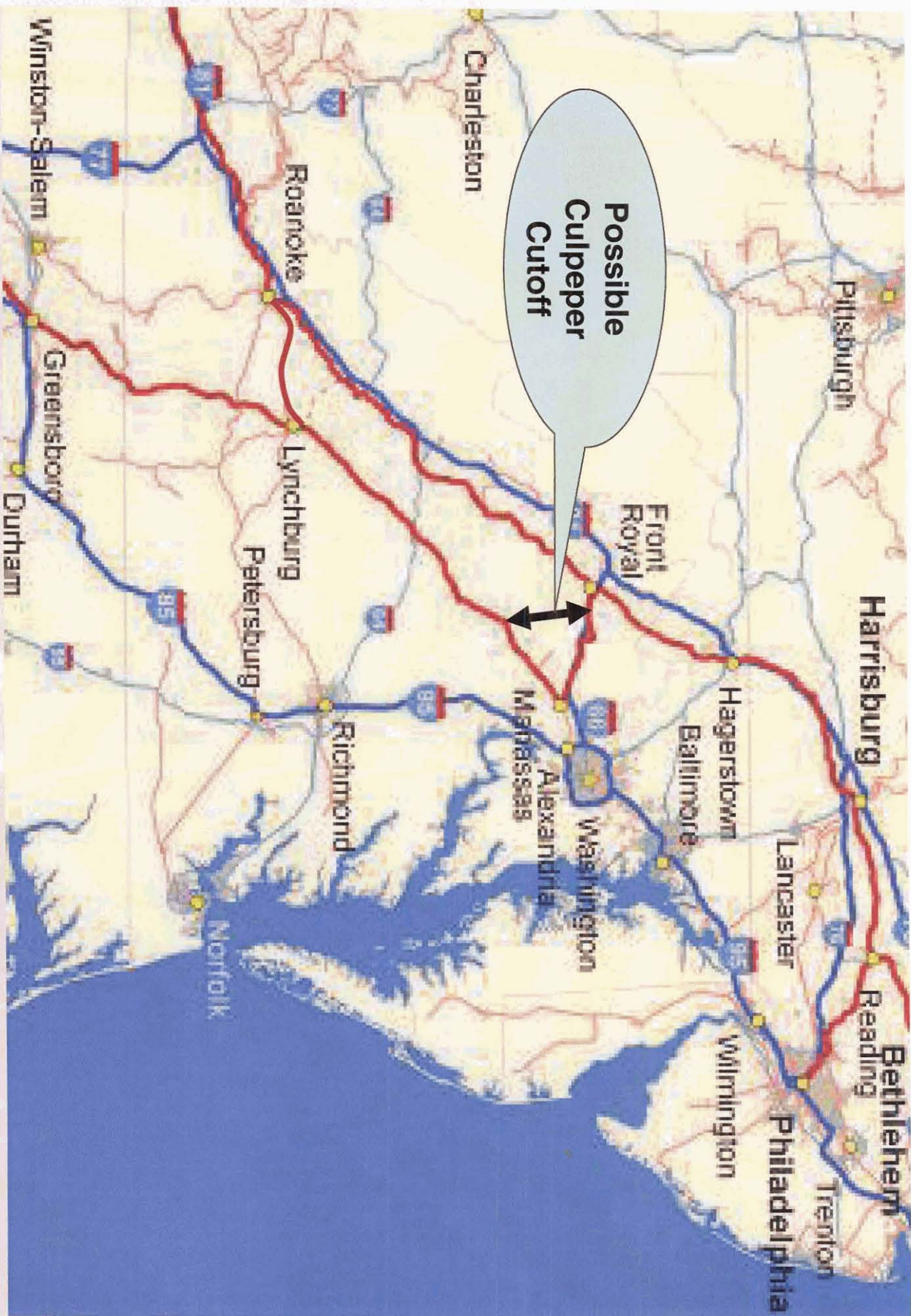
- Between Manassas and Front Royal
- THE major choke point on I-81 Crescent Corridor
- Six projects now underway
 - Longer sidings Manassas-Riverton
 - Double track in vicinity of Virginia Inland Port
 - Traffic control system
 - More reliable train operations
 - Benefits to potential VRE Haymarket extension
- Commitment to haul 40,000 additional container equivalents/year (minimum)





I-81 Freight Rail Study

- NS is modeling I-81 Crescent Corridor impact on Virginia highways (especially I-81)
- Coordination with Commonwealth and Cambridge Systematics
 - Validation of analyses
 - Estimate of through truck diversion
- Complete Spring 2008
- Additional long-term possibility – Culpeper Cutoff



In Closing

- Crescent is a new and unique service that will lure trucks off the road
- The network is a big growth opportunity for NS and will benefit the public
- The costs are large, and require public participation
- Virginia already recognizes the need to invest in this project

Thank You



Riverton Junction Improvements

Project Location: Riverton, Warren County, VA, on Norfolk Southern's Hagerstown-Riverton main line. Project limits: mp H-59 & B-51 +/-

Owner of Property/Right of Way: Norfolk Southern Railway Company

Responsible Party for Continuous Maintenance of Project: Norfolk Southern Railway Company

Project Information:

Description of Project:

Riverton Junction is where Norfolk Southern's B-Line (Manassas-Front Royal) joins the H-Line (Hagerstown-Roanoke). All NS freight trains between the Northeast and the South, regardless of origin or destination, pass through Riverton Junction. All I-81 Crescent Corridor premium intermodal trains to/from the Northeast will also pass through Riverton Junction. To NS, it is a major choke point because more trains are passing between the B-Line and the H-Line than ever before, and when Crescent Corridor trains start operating, it will get worse.

At present, the H-Line is a single track main line equipped with traffic control signaling. The B-Line is unsignaled, but as part of NS's public-private partnership with the Commonwealth of Virginia, where NS received FY 2008 funding to add capacity between Manassas and Front Royal, traffic control signaling will be installed on the B-Line, including to Riverton Junction, by the end of calendar year 2008. The connecting track between the two lines is single track.

The present speed limit through Riverton Junction from all directions is 15 mph. With NS developing truck-competitive intermodal service in this corridor, any cost-effective increase in speed (resulting in a reduction of a train's running time) is desirable. The project proposed for Riverton Junction is to modify the south approach span of the H-Line's Shenandoah River bridge (widening it and converting it to a ballast deck structure), and flattening somewhat the curve of the track connecting the H-Line with the B-Line. This improvement will allow a speed limit increase from 15 mph to 30 mph, and is similar to the public-private partnership completed several years ago that resulted in a new flattened curve at the junction between the NS main line and the B-Line at Manassas. Here also the speed was raised to 30 mph.

The permanent fix for Riverton Junction is a double track 60 mph connection between the two lines, requiring at least one new bridge across the Shenandoah River. Once the Crescent Corridor is implemented, this may be a justifiable project in the future (it was recommended in an earlier MAROPS study), but for now, the improvement proposed above is more affordable and will help significantly.

Appendix 3 – Details of FY2009 Projects

At present, about 16-22 trains a day pass through Riverton Junction, about 12 of them connecting between the B- and H-Lines. Raising the speed from 15 mph to 30 mph will save each train between B- and H-Lines at least five minutes in running time, resulting in an aggregate time savings of 60 minutes per day.

Project Objective:

The overall objective of the project is to increase capacity and to speed up train operations on the Hagerstown-Riverton-Manassas route. This artery today handles all NS's intermodal freight between the Northeast and the Southeast, as well as important container traffic between the Virginia Inland Port and the Port of Hampton Roads. In the future, this artery will also handle all Crescent Corridor intermodal trains to/from the Northeast.

The specific objective is to upgrade the B-Line-H-Line connecting track at Riverton Junction to enable trains to operate at 30 mph and to effect an aggregate running time improvement of 60 minutes per day

Relationship to other projects under development by applicant or previously funded by this program:

This project complements FY2008 projects on B- and H-lines. At present NS is upgrading the Marsh Run-Ashby siding to main line standards and constructing about 3.5 miles of new second main line to create a five mile segment of double track between mp H51.9 – H56.9 in the vicinity of the Virginia Inland Port (see NS's application of 6/13/07 for more detail). Also, NS is in the process of installing four passing tracks between Riverton and Manassas capable of allowing NS's longest trains to meet or pass each other. Finally, traffic control signaling is being installed on the B-Line. When these upgrades, which are on both sides of Riverton Junction, are completed later in 2008, more trains will be able to travel between the South and the Northeast faster. Raising the speed through Riverton Junction as a FY2009 project is thoroughly compatible with the FY2008 projects

Describe the Public Benefit of Project:

Overall public benefits:

- By reducing aggregate delay, and by making freight rail more attractive to potential rail users, this project will help to improve air quality, conserve fuel (because of rail's efficiency advantage) and reduce truck traffic
- By increasing capacity, the project enables the rail mode to absorb more growth
- While not identified as an improvement necessary to extend VRE service to Gainesville/Haymarket, improvement at Riverton Junction will enable freight trains to operate more reliably, allowing smoother and more timely interface with VRE commuter trains.

Appendix 3 – Details of FY2009 Projects

Type of Project:

Project is new construction (new approach span, new connection track between H-Line and B-Line) of rail infrastructure. Includes modification to signal and communication equipment (signal upgrading and relocation, and relocation of fiber optic cable).

Application Scope of Work Covers: Entire project

Project Budget Summary:

| | |
|--|-------------|
| Preliminary Service, Engineering, or Feasibility Study | \$ _____ |
| Environmental Evaluation | \$ _____ |
| Design Engineering | \$ _____ |
| Right-of-way Acquisition | \$ _____ |
| Construction | \$ _____ |
| Construction Management | \$ _____ |
| Lease/Acquisition of Equipment | \$ _____ |
| Other (Relocate fiber optic cable) | \$ _____ |
| | ===== |
| Total Project Budget | \$7,000,000 |

Note: This project is still being designed; project cost is an order-of-magnitude estimate. We expect to have more detail sometime in February and will make this information available to DRPT when it is received. **This is NS's #1 priority REF project for FY2009.**

Rail Enhancement Funds Requested in this Application: \$ 4,900,000 (70%) _____

This request is for capital costs only. NS will assume all ongoing maintenance and operating cost responsibilities and future capital costs.

No provision has been made for crossing closure or grade separation. If Norfolk Southern can successfully negotiate crossing closures as part of the project, the overall project cost may increase but such increase would be funded by Norfolk Southern, thereby increasing NS match to greater than 30%.

Local Match Required by Applicant: \$ 2,100,000 (30%) _____

If Overmatch, Provide Percentage: 0%

1) Match Breakdown by Source (include in-kind)

a. Provider of Local Match Norfolk Southern Railway _____

b. Status (confirmed/anticipated) Confirmed

2) Other Funding Sources Beyond Match Requirement

a. Provider of Over Match n/a

b. Status (confirmed/anticipated) n/a

Project implementation schedule (based in months). List major milestones of the project.

| | |
|--------------------------------|------------------|
| Survey and Develop Plans: | 3 Months |
| Acquire Right of Way: | 3 Months |
| Bidding: | 2 Months |
| Permitting: | 2 Months |
| Relocation of Fiber Optic Line | 1 Month |
| Grading: | 4 Months |
| Track work: | 3 Months |
| Total: | 18 Months |

Note: This schedule is a rough estimate; more detail will be provided when better cost information is received.

Statement on how this Project promotes or does not preclude Dual/Multi-Access Use:

This project is on Norfolk Southern owned right-of-way on which only Norfolk Southern operates; the rail line will remain an exclusive Norfolk Southern route. There is no proposal to change current operations and allow dual access by another railroad on this track. (The competing north-south route of CSX Transportation, Inc. extends between Alexandria, VA and Rocky Mount, NC [via Richmond, VA].) Project will not preclude future passenger service to or through Front Royal, and will indirectly facilitate extension of VRE service to Gainesville/Haymarket.

Project also anticipates intermodal freight growth and will enable service enhancements that will attract domestic truck traffic from many trucking companies.

List additional users of rail line, facility, and/or equipment: trucking companies using intermodal service offered by Norfolk Southern.

Identify any possible Environmental or other issues/concerns within the scope of this project.

Overall environmental effects are expected to be beneficial as rail freight is considerably more fuel efficient and less polluting than truck freight.

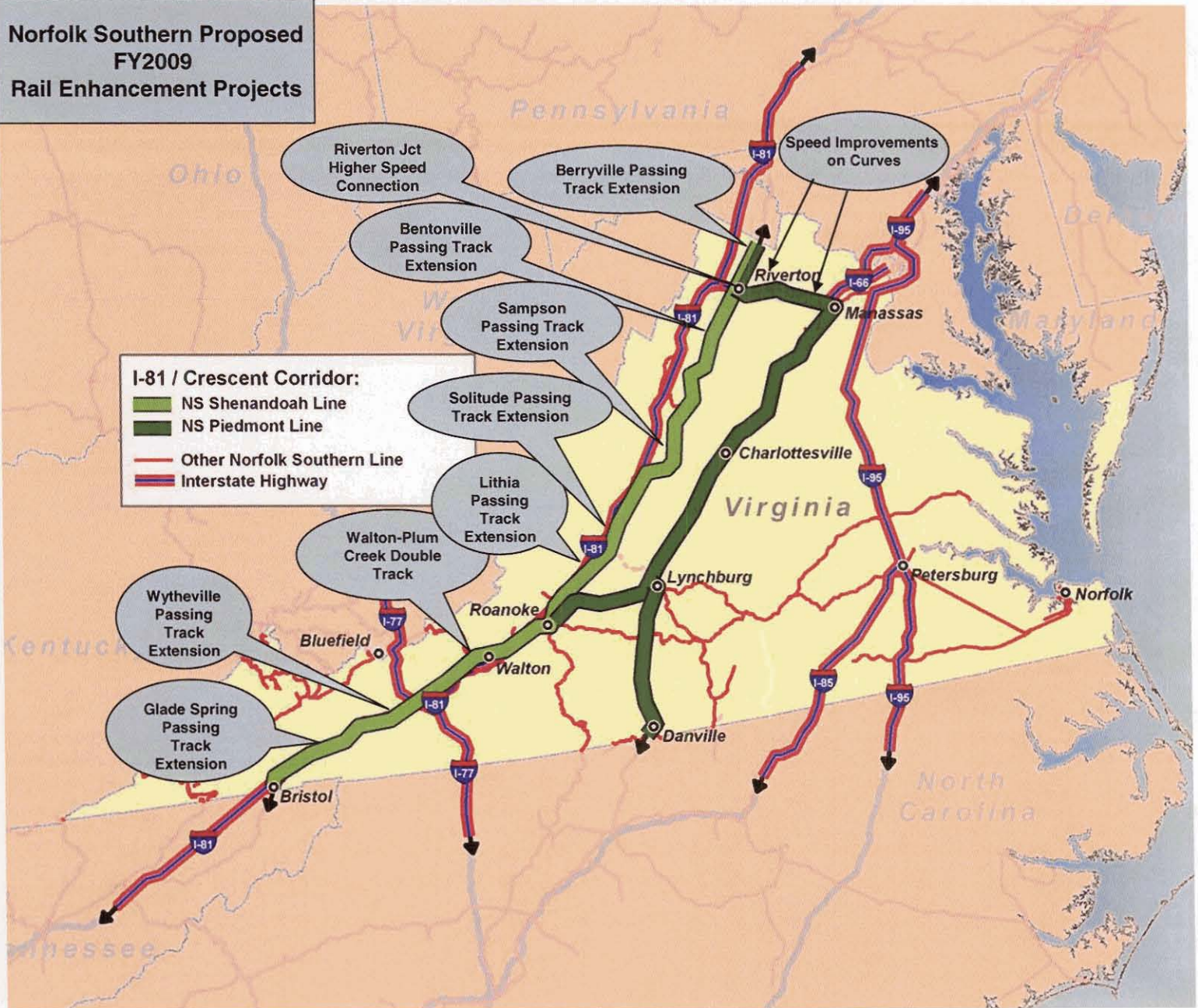
There are no known environmental issues or concerns at this time; a preliminary review indicates that there do not appear to be any open space easements adjacent to NS right-of-way in the project limits.

Added Capacity to Rail Corridor (Additional Railcars or Passengers)

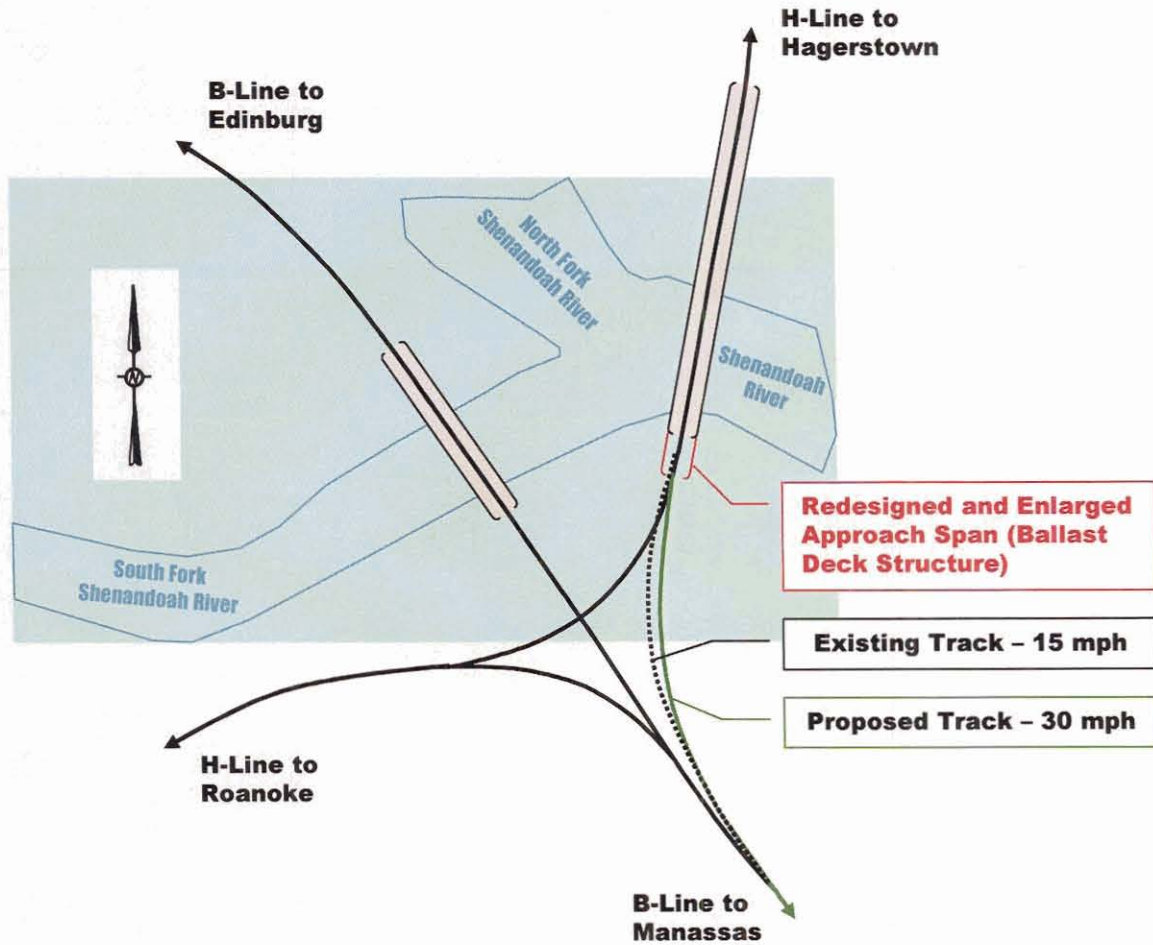
When viewed in isolation, the improved connection at Riverton Junction will reduce aggregate train running time 60 minutes per day, which will allow faster turn times for assets such as locomotives, crews and freight cars. When combined with other planned or proposed projects (e.g. VRE expansion to Haymarket) the synergies will enable additional train starts and increased throughput on this north-south corridor.

Project Map

Norfolk Southern Proposed FY2009 Rail Enhancement Projects



Proposed Reconfiguration of Connecting Track at Riverton Junction, VA



Manassas and Riverton Junction – Running Time Improvements

Project Location: Manassas-Riverton, Prince William-Fauquier-Warren Counties, VA, on Norfolk Southern's Hagerstown-Riverton main line. Project limits: mp B1.0 – B-46.2

Owner of Property/Right of Way: Norfolk Southern Railway Company

Responsible Party for Continuous Maintenance of Project: Norfolk Southern Railway Company

Project Information:

Description of Project:

Throughout most of its history, Norfolk Southern's B-Line has been a branch line with modest traffic. It still follows the alignment on which it was constructed about 150 years ago. Over the past fifteen years, the B-Line between Manassas and Riverton Junction/Front Royal (51 miles) has morphed into Norfolk Southern's sole intermodal route between the Northeast and the South. Maximum authorized speeds presently range from 15 mph to 45 mph with extensive segments of the line being operated at 25-35 mph. Running time for intermodal trains over the 51 miles routinely exceeds two hours.

In order for NS to offer truck-competitive intermodal service in the I-81/I-77/I-85/I-95 corridors, it must reduce the running time of its trains. This issue is being addressed on a number of levels: constructing higher-speed connecting tracks (see Riverton Junction Improvements elsewhere in this Application), installing higher-speed #20 turnouts where passing tracks are being extended, and improving train control signaling (or in the B-Line's case, installing signaling for the first time).

The project described in this section involves minor engineering tweaks to the existing track between Manassas and Riverton Junction to allow modest speed increases for intermodal trains. When complete, intermodal trains will be able to operate over longer distances at constant speeds (much of it in the 40-50 mph range), making for safer and more fuel-efficient operation.

At present, about 12 trains a day (most of them intermodal) operate the entire distance between Manassas and Riverton. Reducing their running time will enable NS to offer more truck-competitive schedules and thus attract more trucks off the Interstates and onto intermodal trains.

The estimated cost of this project is \$800,000, and is of an order-of-magnitude nature. We expect more detailed information – cost and scope of work – sometime in February, and NS will furnish this information to DRPT when it is received.

Project Objective:

The overall objective of the project is to reduce the running time of trains between Manassas and Front Royal, thereby improving train performance between the Northeast and the South. This artery today handles all NS's intermodal freight between the Northeast and the Southeast, as well as important container traffic between the Virginia Inland Port and the Port of Hampton Roads. In the future, this artery will also handle most of the Crescent Corridor intermodal trains to/from the Northeast.

The specific objective is to prepare the B-Line to accommodate I-81 Crescent Corridor intermodal trains. These trains will require faster schedules and more reliability than most of the trains using the B-Line today if they are to succeed in attracting trucks off the highway.

Relationship to other projects under development by applicant or previously funded by this program:

This project complements FY2008 projects on B- and H-lines. At present NS is upgrading the Marsh Run-Ashby siding to main line standards and constructing about 3.5 miles of new second main line to create a five mile segment of double track between mp H51.9 – H56.9 in the vicinity of the Virginia Inland Port (see NS's application of 6/13/07 for more detail). Also, NS is in the process of installing four passing tracks between Riverton and Manassas capable of allowing NS's longest trains to meet or pass each other. Finally, traffic control signaling is being installed on the B-Line. When these upgrades are completed later in 2008, and when improvements are made to the connecting track between the B-Line and H-Line at Riverton Junction, more trains will be able to travel between the South and the Northeast faster. Reducing running times between Manassas and Riverton as a FY2009 project is thoroughly compatible with the FY2008 projects

Describe the Public Benefit of Project:

Overall public benefits:

- By reducing aggregate delay, and by making freight rail more attractive to potential rail users, this project will help to improve air quality, conserve fuel (because of rail's efficiency advantage) and reduce truck traffic
- By increasing capacity, the project enables the rail mode to absorb more growth
- Some of the improvements may benefit the proposed VRE extension to Haymarket by making NS's route more compatible with the higher operating speeds typical of passenger trains.
- Reduction of running time for freight trains will result in more reliable operation, allowing smoother and more timely interface with VRE commuter trains.

Appendix 3 – Details of FY2009 Projects

Type of Project:

Project involves rehabilitation/modification of existing rail infrastructure. More complete details to follow.

Application Scope of Work Covers: Entire project

Project Budget Summary:

| | |
|--|-----------|
| Preliminary Service, Engineering, or Feasibility Study | \$ _____ |
| Environmental Evaluation | \$ _____ |
| Design Engineering | \$ _____ |
| Right-of-way Acquisition | \$ _____ |
| Construction | \$ _____ |
| Construction Management | \$ _____ |
| Lease/Acquisition of Equipment | \$ _____ |
| Other (Relocate fiber optic cable) | \$ _____ |
| | ===== |
| Total Project Budget | \$800,000 |

Note: This project is still being designed; project cost is an order-of-magnitude estimate. We expect to have more detail sometime in February and will make this information available to DRPT when it is received. **This is NS's #2 priority REF project for FY2009.**

Rail Enhancement Funds Requested in this Application: \$ 560,000 (70%)

This request is for capital costs only. NS will assume all ongoing maintenance and operating cost responsibilities and future capital costs.

No provision has been made for crossing closure or grade separation. If Norfolk Southern can successfully negotiate crossing closures as part of the project, the overall project cost may increase but such increase would be funded by Norfolk Southern, thereby increasing NS match to greater than 30%.

Local Match Required by Applicant: \$ 240,000 (30%)

If Overmatch, Provide Percentage: 0%

1) Match Breakdown by Source (include in-kind)

Appendix 3 – Details of FY2009 Projects

a. Provider of Local Match Norfolk Southern Railway

b. Status (confirmed/anticipated) Confirmed

2) Other Funding Sources Beyond Match Requirement

a. Provider of Over Match n/a

b. Status (confirmed/anticipated) n/a

Project implementation schedule (based in months). List major milestones of the project.

| | |
|--------------------------------|------------------|
| Survey and Develop Plans: | 3 Months |
| Acquire Right of Way: | 3 Months |
| Bidding: | 2 Months |
| Permitting: | 2 Months |
| Relocation of Fiber Optic Line | 1 Month |
| Grading: | 4 Months |
| Track work: | 3 Months |
| Total: | 18 Months |

Note: This schedule is a rough estimate; more detail will be provided when better cost information is received.

Statement on how this Project promotes or does not preclude Dual/Multi-Access Use:

This project is on Norfolk Southern owned right-of-way on which only Norfolk Southern operates; the rail line will remain an exclusive Norfolk Southern route. There is no proposal to change current operations and allow dual access by another railroad on this track. (The competing north-south route of CSX Transportation, Inc. extends between Alexandria, VA and Rocky Mount, NC [via Richmond, VA].) Project will not preclude future passenger service to or through Front Royal, and will indirectly facilitate extension of VRE service to Gainesville/Haymarket.

Project also anticipates intermodal freight growth and will enable service enhancements that will attract domestic truck traffic from many trucking companies.

List additional users of rail line, facility, and/or equipment: trucking companies using intermodal service offered by Norfolk Southern.

Identify any possible Environmental or other issues/concerns within the scope of this project.

Overall environmental effects are expected to be beneficial as rail freight is considerably more fuel efficient and less polluting than truck freight.

There are no known environmental issues or concerns at this time.

Added Capacity to Rail Corridor (Additional Railcars or Passengers)

When viewed in isolation, reduced running time between Manassas and Riverton will reduce further aggregate train running time, which will allow faster turn times for assets such as locomotives, crews and freight cars. When combined with other planned or proposed projects (e.g. VRE expansion to Haymarket) the synergies will enable additional train starts and increased throughput on this north-south corridor.

Project Map

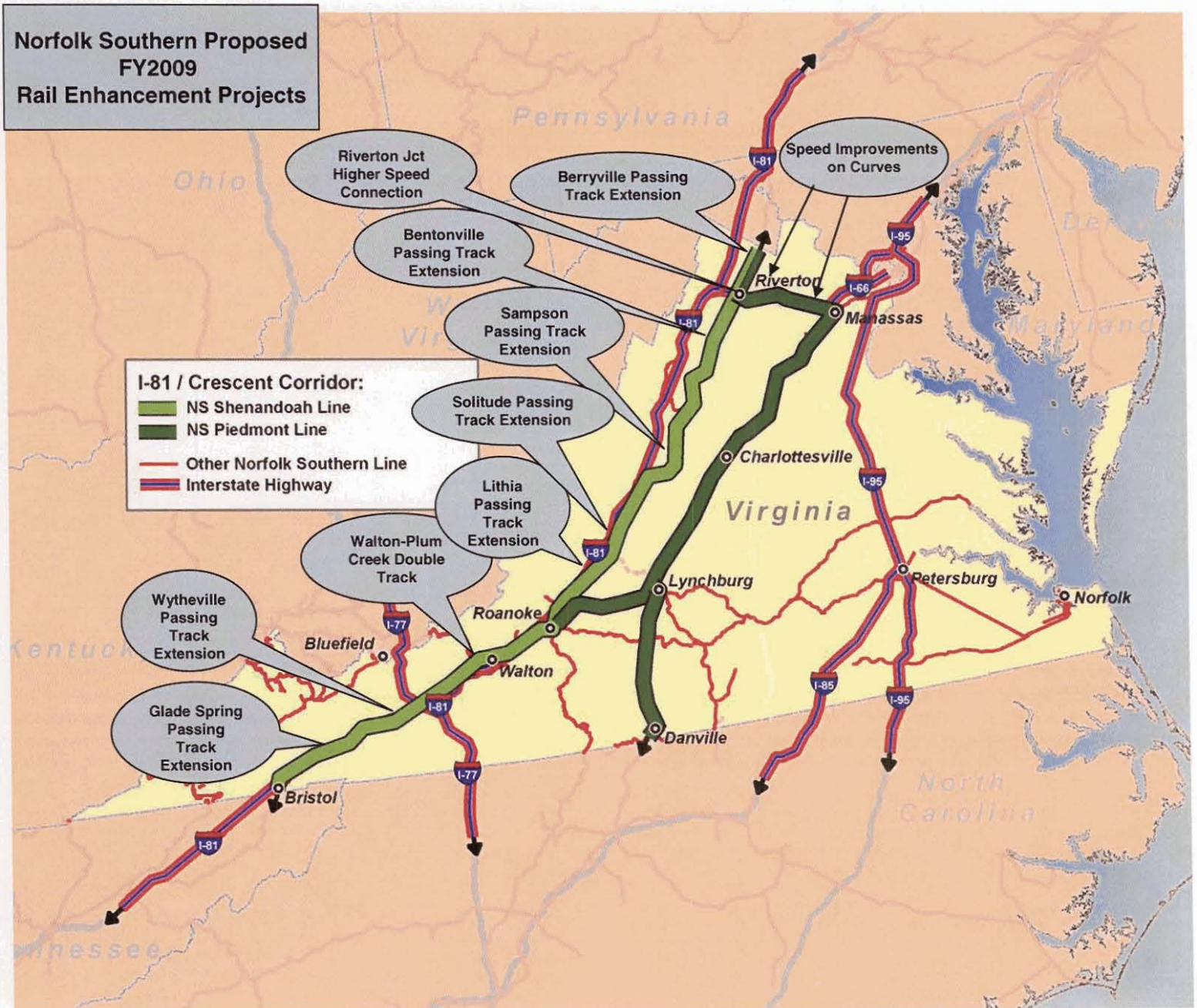
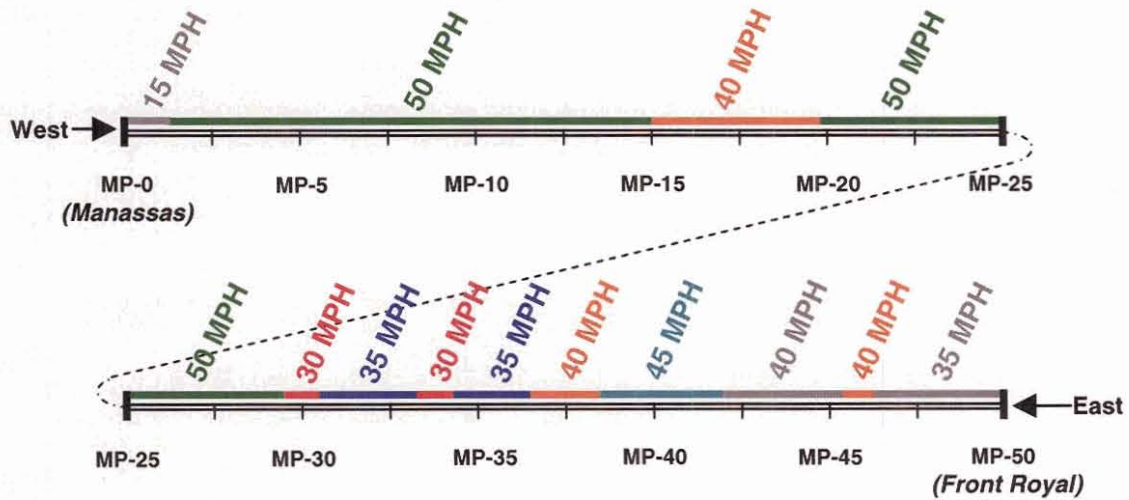


Diagram of Proposed Maximum Operating Speeds Between Manassas and Riverton, VA



Note: Gray segments indicate existing speeds.
Colored segments indicate proposed future speeds.

Berryville Passing Track Extension

Project Location: Berryville, Clarke County, VA, on Norfolk Southern's Hagerstown-Riverton main line. Project limits: mp H37.6-H39.8

Owner of Property/Right of Way: Norfolk Southern Railway Company

Responsible Party for Continuous Maintenance of Project: Norfolk Southern Railway Company

Project Information:

Description of Project:

Berryville is located between Hagerstown, MD and Riverton Junction (Front Royal), VA on Norfolk Southern's main artery between the Southeast (including Virginia) and Northeast. This line is part of the only north-south rail route east of Cincinnati, OH with sufficient clearance to handle "double-stack" container traffic, including much of that moving to/from the port of Norfolk, VA. The route also parallels Interstate 81.

The Hagerstown-Riverton line is a signaled, single main line track. Trains pass or overtake each other at passing tracks. This project would upgrade the existing 5,700-foot passing track at Berryville to accommodate longer trains at higher speeds.

At present, trains using the siding are limited to 10 mph. Further, the siding is only 5,700 feet long. 85-90% of the 16-20 trains/day operating between Hagerstown and Riverton are too long to fit into the siding. NS proposes to replace 10% of the crossties in, and to surface, the existing siding; to replace existing #12 turnouts with #20 turnouts; and to construct 5,300 feet of new track to enlarge the siding to a total length of 11,000 feet. After completion, any train operating between Hagerstown and Riverton will be able to meet or pass any other train at Berryville, and trains using the siding will be able to operate over it at 25 mph or more.

Project Objective:

The overall objective of the project is to increase capacity and to speed up train operations on the Hagerstown-Riverton main line. This artery today handles all NS's freight between the Northeast and the Southeast, as well as important container traffic between the Virginia Inland Port and the Port of Hampton Roads. In the future, this artery will also handle all Crescent Corridor intermodal trains to/from the Northeast.

The specific objective is to upgrade and extend the passing track at Berryville. NS trains incur an aggregate delay of 12 hours daily because of the inability to utilize fully the passing track at Berryville. Once the passing track is improved, aggregate delay will be twelve hours less than it is today.

Relationship to other projects under development by applicant or previously funded by this program:

This project complements FY2008 projects on B- and H-lines. At present NS is upgrading the Marsh Run-Ashby siding to main line standards and constructing about 3.5 miles of new second main line to create a five mile segment of double track between mp H51.9 – H56.9 in the vicinity of the Virginia Inland Port (see NS's application of 6/13/07 for more detail). By upgrading and extending the Berryville siding in FY2009, NS will add a second location on NS's Riverton-Hagerstown main line (59 miles) where two contemporary intermodal trains – Crescent Corridor or otherwise – will be able to meet or pass.

Describe the Public Benefit of Project:

Overall public benefits:

- By reducing aggregate delay, and by making freight rail more attractive to potential rail users, this project will help to improve air quality, conserve fuel (because of rail's efficiency advantage) and reduce truck traffic
- By increasing capacity, the project enables the rail mode to absorb more growth
- While not identified as an improvement necessary to extend VRE service to Gainesville/Haymarket, Berryville will add much-needed capacity and staging flexibility that may be needed with startup of VRE service to Haymarket.

Type of Project:

Project is rehabilitation (existing passing track) and new construction (passing track extension) of rail infrastructure. Includes modification to signal and communication equipment (signal upgrading and relocation, and relocation of fiber optic cable).

Application Scope of Work Covers: Entire project

Project Budget Summary:

| | |
|--|-------------|
| Preliminary Service, Engineering, or Feasibility Study | \$ _____ |
| Environmental Evaluation | \$ _____ |
| Design Engineering | \$ 313,294 |
| Right-of-way Acquisition | \$ 57,750 |
| Construction | \$3,324,956 |
| Construction Management | \$ 226,669 |
| Lease/Acquisition of Equipment | \$ _____ |
| Other (Relocate fiber optic cable) | \$ 697,331 |
| | ===== |
| Total Project Budget | \$4,620,000 |

Appendix 3 – Details of FY2009 Projects

Rail Enhancement Funds Requested in this Application: \$ 3,234,000 (70%)_____

This request is for capital costs only. NS will assume all ongoing maintenance and operating cost responsibilities and future capital costs.

No provision has been made for crossing closure or grade separation. If Norfolk Southern can successfully negotiate crossing closures as part of the project, the overall project cost may increase but such increase would be funded by Norfolk Southern, thereby increasing NS match to greater than 30%.

Local Match Required by Applicant: \$ 1,386,000 (30%)_____

If Overmatch, Provide Percentage: 0%

1) Match Breakdown by Source (include in-kind)

a. Provider of Local Match Norfolk Southern Railway_____

b. Status (confirmed/anticipated) Confirmed_____

2) Other Funding Sources Beyond Match Requirement

a. Provider of Over Match n/a_____

b. Status (confirmed/anticipated) n/a_____

M. Project implementation schedule (based in months). List major milestones of the project.

| | |
|--------------------------------|------------------|
| Survey and Develop Plans: | 3 Months |
| Acquire Right of Way: | 3 Months |
| Bidding: | 2 Months |
| Permitting: | 2 Months |
| Relocation of Fiber Optic Line | 1 Month |
| Grading: | 4 Months |
| Track work: | 3 Months |
| Total: | 18 Months |

Appendix 3 – Details of FY2009 Projects

Statement on how this Project promotes or does not preclude Dual/Multi-Access Use:

This project is on Norfolk Southern owned right-of-way on which only Norfolk Southern operates; the rail line will remain an exclusive Norfolk Southern route. There is no proposal to change current operations and allow dual access by another railroad on this track. (The competing north-south route of CSX Transportation, Inc. extends between Alexandria, VA and Rocky Mount, NC [via Richmond, VA].) Project will not preclude future passenger service through Berryville, and will indirectly facilitate extension of VRE service to Gainesville/Haymarket.

Project also anticipates intermodal freight growth and will enable service enhancements that will attract domestic truck traffic from many trucking companies.

List additional users of rail line, facility, and/or equipment: trucking companies using intermodal service offered by Norfolk Southern.

Identify any possible Environmental or other issues/concerns within the scope of this project.

Overall environmental effects are expected to be beneficial as rail freight is considerably more fuel efficient and less polluting than truck freight.

There are no known environmental issues or concerns at this time; there do not appear to be any open space easements adjacent to NS right-of-way in the project limits.

Added Capacity to Rail Corridor (Additional Railcars or Passengers)

When viewed in isolation, the expanded passing track at Berryville will reduce 12 hours aggregate train delay, which will allow faster turn times for assets such as locomotives, crews and freight cars. When combined with other planned or proposed projects (e.g. VRE expansion to Haymarket) the synergies will enable additional train starts and increased throughput on this north-south corridor.

Project Map

Norfolk Southern Proposed FY2009 Rail Enhancement Projects

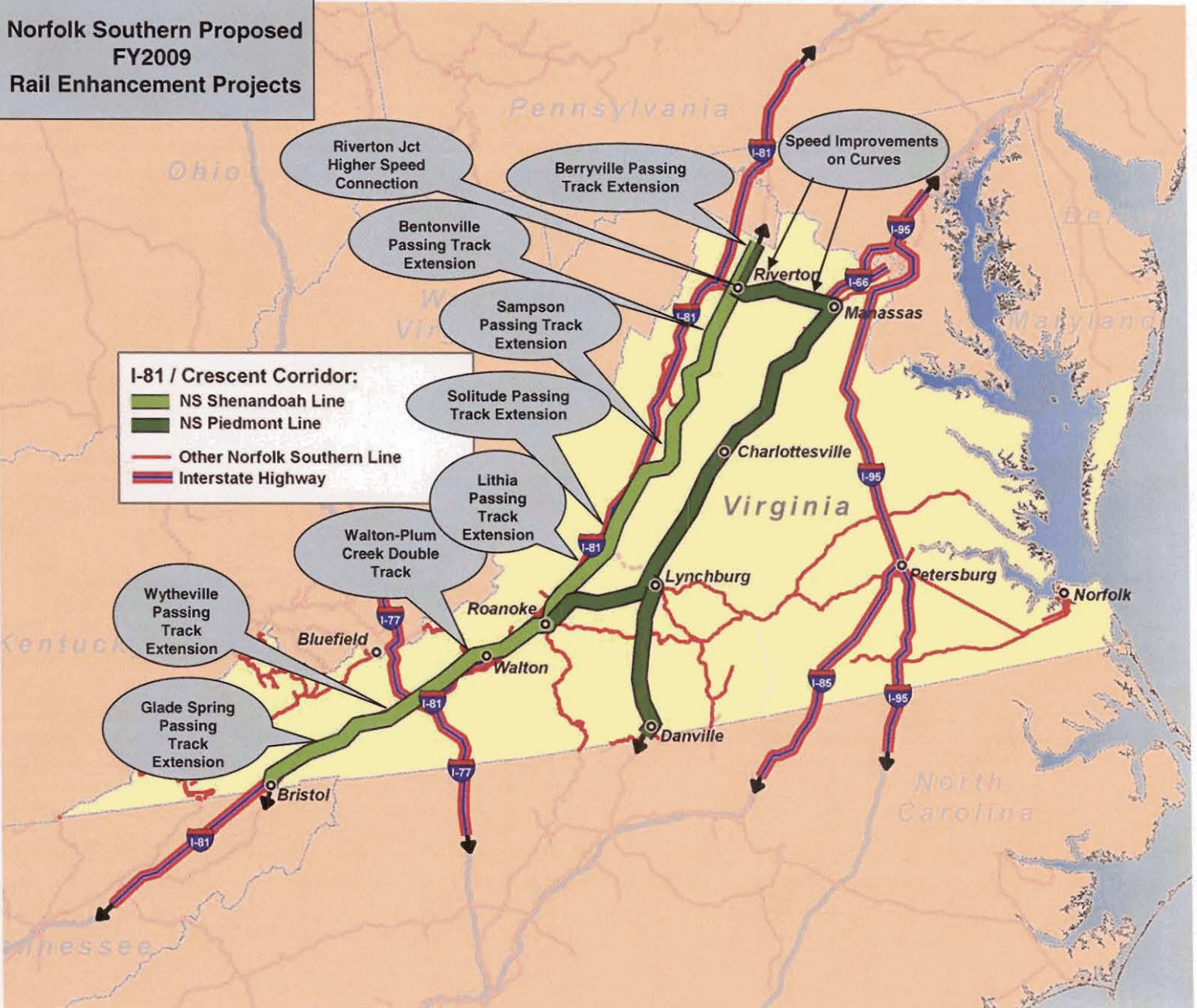
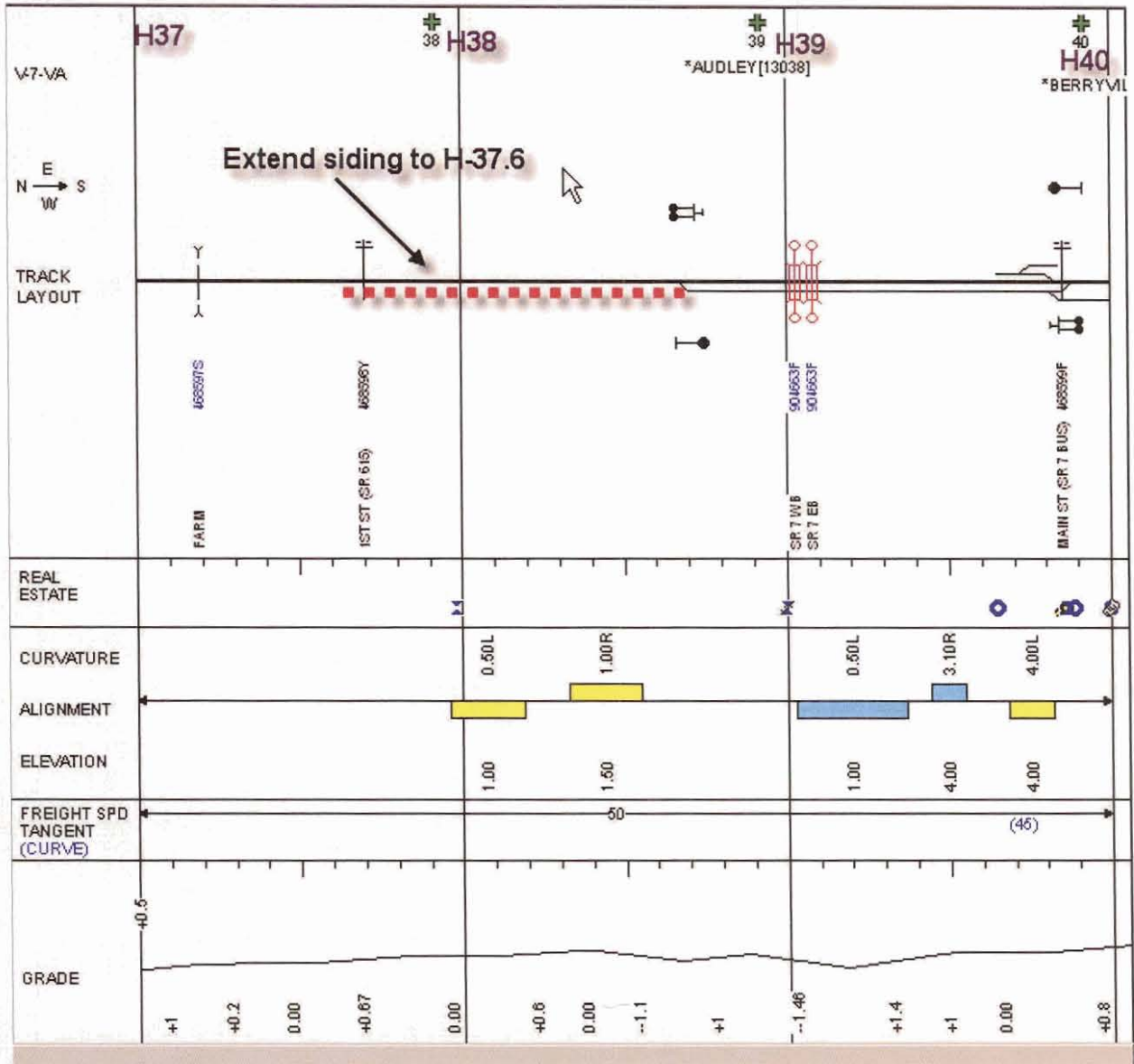


Diagram of Proposed Passing Track Extension Berryville, VA



Solitude Passing Track Extension

Project Location: Solitude, Botetourt County, VA, on Norfolk Southern's Riverton-Roanoke main line. Project limits: mp H206.1 – H208.2

Owner of Property/Right of Way: Norfolk Southern Railway Company

Responsible Party for Continuous Maintenance of Project: Norfolk Southern Railway Company

Project Information:

Description of Project:

Solitude is located between Riverton and Roanoke, VA on Norfolk Southern's main artery between the Northeast and Tennessee. This line is a secondary main line today but will become a major component of the I-81 Crescent Corridor for premium intermodal traffic between the Northeast and two major Tennessee markets. This route is cleared for double stack container traffic and parallels Interstate 81.

The Riverton-Roanoke line is a single track main line, governed by signaled traffic control, with short (less than 8000') passing tracks about every ten miles. Trains pass or overtake each other at passing tracks. This project would upgrade the existing 6,018-foot passing track at Solitude to accommodate longer trains at higher speeds.

Longer passing tracks are badly needed between Shenandoah and Roanoke, about 130 miles. In that distance, there is only one place where long trains can meet or pass: Loch Laird passing track, 8061' long, which is 50 miles north of Roanoke and 80 miles south of Shenandoah.

At present, trains using the passing track at Solitude are limited to 10 mph. Further, the passing track is only 6,018 feet long. Most of the 14-18 trains/day operating between Roanoke and Shenandoah are too long to fit into the passing track. NS proposes to replace 10% of the crossties in, and to surface, the existing passing track; to replace existing #12 turnouts with #20 turnouts; and to construct 5,000 feet of new track to enlarge the passing track to a total length of 11,000 feet. After completion, any train operating between Roanoke and Riverton will be able to meet or pass any other train at Solitude, and trains using the passing track will be able to operate over it at 25 mph or more.

Project Objective:

The overall objective of the project is to increase capacity and to speed up train operations on the Riverton-Roanoke main line. This artery today handles merchandise, coal and grain, and will be an important component of the I-81 Crescent Corridor for

Appendix 3 – Details of FY2009 Projects

premium intermodal traffic between the Northeast and Southwest via Memphis, Tennessee.

The specific objective is to upgrade and extend the passing track at Solitude. NS trains incur an aggregate delay of 4 hours daily because of the inability to utilize fully the passing track at Solitude. Once the passing track is improved, aggregate delay will be 4 hours less than it is today.

Relationship to other projects under development by applicant or previously funded by this program:

This project complements the FY2008 project on the H-line at Front Royal. At present NS is upgrading the Marsh Run-Ashby siding to main line standards and constructing about 3.5 miles of new second main line to create a five mile segment of double track between mp H51.9 – H56.9 in the vicinity of the Virginia Inland Port (see NS's application of 6/13/07 for more detail). By upgrading and extending the Solitude passing track in FY2009 (along with the Berryville, Lithia, Sampson and Bentonville passing tracks described elsewhere in this Application as well as the five miles of double track north of Front Royal), NS will create eight locations between Roanoke and Hagerstown (240 miles) where two contemporary intermodal trains – Crescent Corridor or otherwise – will be able to meet or pass.

Describe the Public Benefit of Project:

Overall public benefits:

- This project, with the other siding extension projects mentioned above, will make possible I-81 Crescent Corridor premium intermodal service. At present, very few locations exist where two 8000' trains can pass each other between Hagerstown and Roanoke. The standard length of an I-81 Crescent Corridor intermodal train will be 8000'.
- By reducing aggregate delay, and by making freight rail more attractive to potential rail users, this project will help to improve air quality, conserve fuel (because of rail's efficiency advantage) and reduce truck traffic
- By increasing capacity, the project enables the rail mode to absorb more growth

Type of Project:

Project is rehabilitation (existing passing track) and new construction (passing track extension) of rail infrastructure. Includes modification to signal and communication equipment (signal upgrading and relocation, and relocation of fiber optic cable).

Application Scope of Work Covers: Entire project

Appendix 3 – Details of FY2009 Projects

Project Budget Summary:

| | |
|--|-------------|
| Preliminary Service, Engineering, or Feasibility Study | \$ 119,292 |
| Environmental Evaluation | \$ 126,987 |
| Design Engineering | \$ 242,430 |
| Right-of-way Acquisition | \$ |
| Construction | \$3,848,097 |
| Construction Management | \$ 357,872 |
| Lease/Acquisition of Equipment | \$ |
| Other (Relocate fiber optic cable) | \$ 384,810 |
| | ===== |
| Total Project Budget | \$5,079,488 |

Rail Enhancement Funds Requested in this Application: \$ 3,555,642 (70%)

This request is for capital costs only. NS will assume all ongoing maintenance and operating cost responsibilities and future capital costs.

No provision has been made for crossing closure or grade separation. If Norfolk Southern can successfully negotiate crossing closures as part of the project, the overall project cost may increase but such increase would be funded by Norfolk Southern, thereby increasing NS match to greater than 30%.

Local Match Required by Applicant: \$ 1,523,8460 (30%)

If Overmatch, Provide Percentage: 0%

1) Match Breakdown by Source (include in-kind)

- a. Provider of Local Match Norfolk Southern Railway
- b. Status (confirmed/anticipated) Confirmed

2) Other Funding Sources Beyond Match Requirement

- a. Provider of Over Match n/a
- b. Status (confirmed/anticipated) n/a

Appendix 3 – Details of FY2009 Projects

M. Project implementation schedule (based in months). List major milestones of the project.

| | |
|--------------------------------|------------------|
| Survey and Develop Plans: | 3 Months |
| Acquire Right of Way: | 3 Months |
| Bidding: | 2 Months |
| Permitting: | 2 Months |
| Relocation of Fiber Optic Line | 1 Month |
| Grading: | 4 Months |
| Track work: | 3 Months |
| Total: | 18 Months |

Statement on how this Project promotes or does not preclude Dual/Multi-Access Use:

This project is on Norfolk Southern owned right-of-way on which only Norfolk Southern operates; the rail line will remain an exclusive Norfolk Southern route. There is no proposal to change current operations and allow dual access by another railroad on this track. (The competing north-south route of CSX Transportation, Inc. extends between Alexandria, VA and Rocky Mount, NC [via Richmond, VA].) Project will not preclude future passenger service between Roanoke and Hagerstown.

Project also anticipates intermodal freight growth and will enable service enhancements that will attract domestic truck traffic from many trucking companies.

List additional users of rail line, facility, and/or equipment: trucking companies using intermodal service offered by Norfolk Southern.

Identify any possible Environmental or other issues/concerns within the scope of this project.

Overall environmental effects are expected to be beneficial as rail freight is considerably more fuel efficient and less polluting than truck freight.

There are no known environmental issues or concerns at this time.

Added Capacity to Rail Corridor (Additional Railcars or Passengers)

When viewed in isolation, the expanded passing track at Solitude will reduce 4 hours aggregate train delay. When combined with the projects proposed at Berryville, Lithia, Sampson and Bentonville passing tracks described elsewhere in this Application as well as the five miles of double track north of Front Royal, the aggregate train delay is reduced by approximately 30 hours per day. Reducing this delay will allow faster turn times for assets such as locomotives, crews and freight cars. When combined with other planned or proposed projects, the synergies will enable additional train starts and increased throughput on this north-south corridor.

Project Map

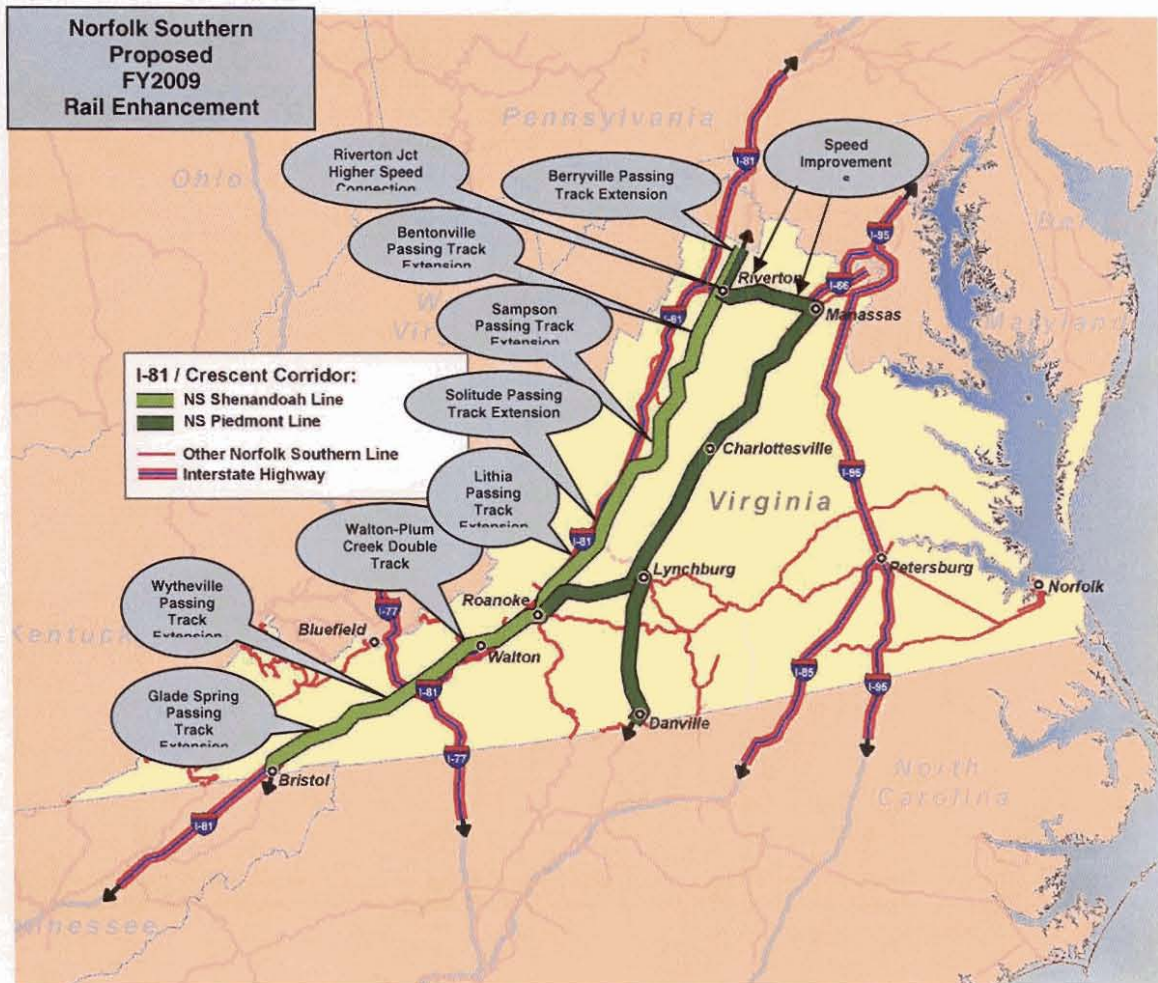
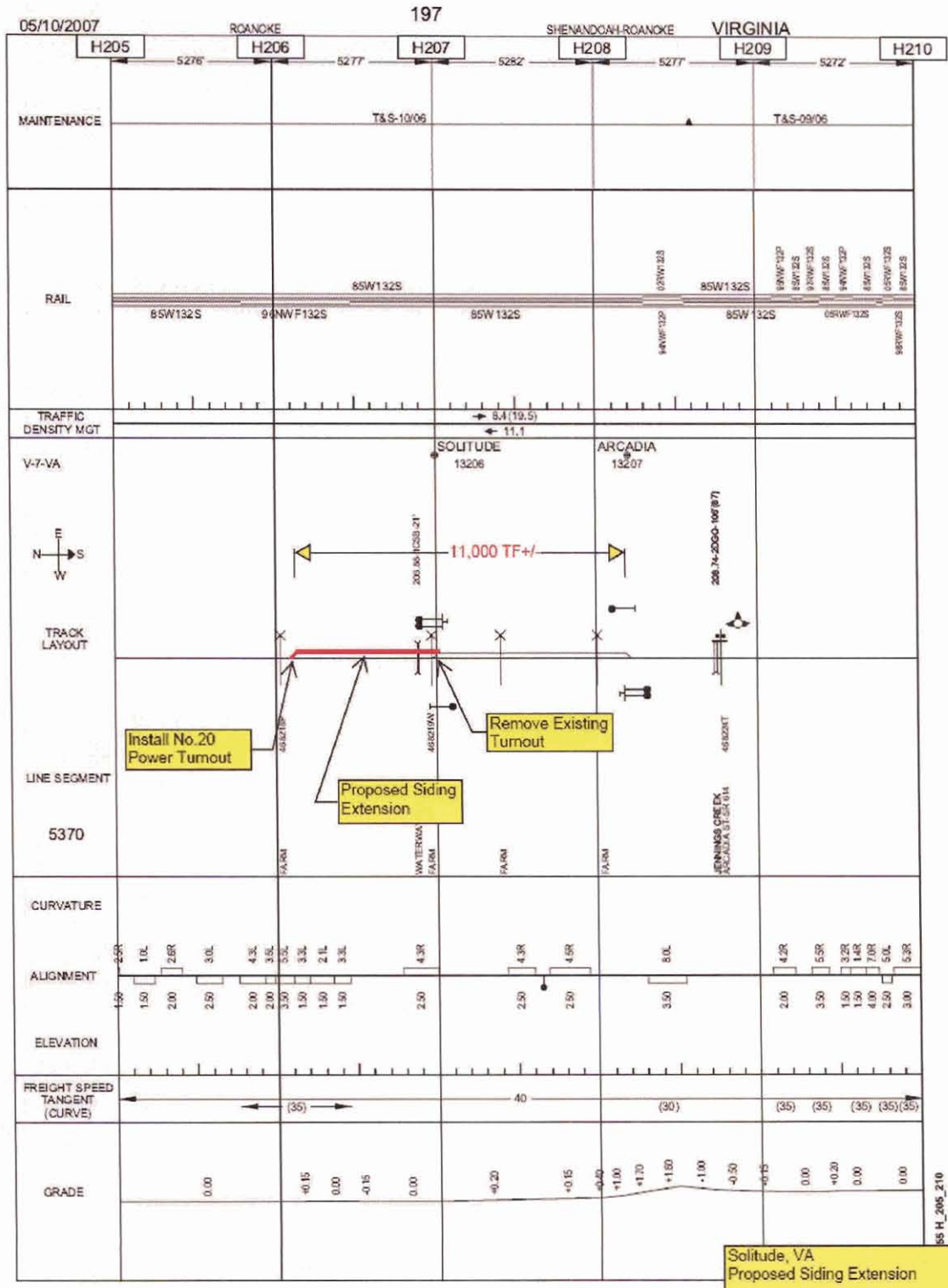


Diagram of Proposed Passing Track Extension – Solitude, VA



Wytheville Passing Track Extension

Project Location: Wytheville, Wythe County and Wytheville corporate limits, VA, on Norfolk Southern's Walton-Bristol main line. Project limits: mp NB336.2 – NB339.6

Owner of Property/Right of Way: Norfolk Southern Railway Company

Responsible Party for Continuous Maintenance of Project: Norfolk Southern Railway Company

Project Information:

Description of Project:

Wytheville is located between Walton and Bristol, VA on Norfolk Southern's main artery between the Northeast and Tennessee. This line is a secondary main line today but will become a major component of the I-81 Crescent Corridor for premium intermodal traffic between the Northeast and two major Tennessee markets. This route is cleared for double stack container traffic and parallels Interstate 81.

The Walton-Bristol line, 107 miles, is a single track main line, governed by signaled traffic control, with short (less than 8000') passing tracks about every fifteen miles. Trains pass or overtake each other at passing tracks. This project would upgrade the existing 5,518-foot passing track at Wytheville to accommodate longer trains at higher speeds.

Longer passing tracks are needed between Walton and Bristol. In that distance, there is only one passing track more than 8,000 feet in length – at Duncan, approximately midway between Walton and Bristol. Extending the Wytheville passing track will provide a second meeting point between Walton and Bristol that will be essential before I-81 Crescent Corridor intermodal service can begin.

At present, trains using the passing track at Wytheville are limited to 10 mph. Further, the passing track is only 5,518 feet long. Most of the 13-15 trains/day operating between Walton and Bristol are too long to fit into the passing track. NS proposes to replace 10% of the crossties in, and to surface, the existing passing track; to replace existing #12 turnouts with #20 turnouts; and to construct 12,500 feet of new track to enlarge the passing track to a total length of 18,000 feet. After completion, any train operating between Walton and Bristol will be able to meet or pass any other train at Wytheville, and trains using the passing track will be able to operate over it at 25 mph or more.

Project Objective:

The overall objective of the project is to increase capacity and to speed up train operations on the Walton-Bristol main line. This artery today handles merchandise, coal and intermodal, and will be an important component of the I-81 Crescent Corridor for

Appendix 3 – Details of FY2009 Projects

premium intermodal traffic between the Northeast and Southwest via Memphis, Tennessee.

The specific objective is to upgrade and extend the passing track at Wytheville. NS trains incur an aggregate delay of 4 hours daily because of the inability to utilize fully the passing track at Wytheville. Once the passing track is improved, aggregate delay will be 4 hours less than it is today.

Relationship to other projects under development by applicant or previously funded by this program:

This project complements the FY2008 project on the H-line at Front Royal as well as the five passing track extensions proposed between Roanoke and Hagerstown on the H-line. Together with the Wytheville and Glade Spring passing track projects and construction of double track between Walton and Plum Creek (described elsewhere in this application), NS will create nine new locations between Bristol and Hagerstown (390 miles) where two contemporary intermodal trains – Crescent Corridor or otherwise – will be able to meet or pass.

Describe the Public Benefit of Project:

Overall public benefits:

- This project, with the other siding extension projects mentioned above, will make possible I-81 Crescent Corridor premium intermodal service. At present, very few locations exist where two 8000' trains can pass each other between Hagerstown and Bristol. The standard length of an I-81 Crescent Corridor intermodal train will be 8000'.
- By reducing aggregate delay, and by making freight rail more attractive to potential rail users, this project will help to improve air quality, conserve fuel (because of rail's efficiency advantage) and reduce truck traffic
- By increasing capacity, the project enables the rail mode to absorb more growth

Type of Project:

Project is rehabilitation (existing passing track) and new construction (passing track extension) of rail infrastructure. Includes modification to signal and communication equipment (signal upgrading and relocation, and relocation of fiber optic cable).

Application Scope of Work Covers: Entire project

Appendix 3 – Details of FY2009 Projects

Project Budget Summary:

| | |
|--|-------------|
| Preliminary Service, Engineering, or Feasibility Study | \$ 217,362 |
| Environmental Evaluation | \$ 231,386 |
| Design Engineering | \$ 441,737 |
| Right-of-way Acquisition | \$ |
| Construction | \$7,011,704 |
| Construction Management | \$ 652,089 |
| Lease/Acquisition of Equipment | \$ _____ |
| Other (Relocate fiber optic cable) | \$ 701,170 |
| | ===== |
| Total Project Budget | \$9,255,448 |

Rail Enhancement Funds Requested in this Application: \$ 6,478,814 (70%)

This request is for capital costs only. NS will assume all ongoing maintenance and operating cost responsibilities and future capital costs.

No provision has been made for crossing closure or grade separation. If Norfolk Southern can successfully negotiate crossing closures as part of the project, the overall project cost may increase but such increase would be funded by Norfolk Southern, thereby increasing NS match to greater than 30%.

Local Match Required by Applicant: \$ 2,776,634 (30%)

If Overmatch, Provide Percentage: 0%

1) Match Breakdown by Source (include in-kind)

a. Provider of Local Match Norfolk Southern Railway

b. Status (confirmed/anticipated) Confirmed

2) Other Funding Sources Beyond Match Requirement

a. Provider of Over Match n/a

b. Status (confirmed/anticipated) n/a

Appendix 3 – Details of FY2009 Projects

M. Project implementation schedule (based in months). List major milestones of the project.

| | |
|--------------------------------|------------------|
| Survey and Develop Plans: | 3 Months |
| Acquire Right of Way: | 3 Months |
| Bidding: | 2 Months |
| Permitting: | 2 Months |
| Relocation of Fiber Optic Line | 1 Month |
| Grading: | 4 Months |
| Track work: | 3 Months |
| Total: | 18 Months |

Statement on how this Project promotes or does not preclude Dual/Multi-Access Use:

This project is on Norfolk Southern owned right-of-way on which only Norfolk Southern operates; the rail line will remain an exclusive Norfolk Southern route. There is no proposal to change current operations and allow dual access by another railroad on this track. (The competing north-south route of CSX Transportation, Inc. extends between Alexandria, VA and Rocky Mount, NC [via Richmond, VA].) Project will not preclude future passenger service between Roanoke and Bristol.

Project also anticipates intermodal freight growth and will enable service enhancements that will attract domestic truck traffic from many trucking companies.

List additional users of rail line, facility, and/or equipment: trucking companies using intermodal service offered by Norfolk Southern.

Identify any possible Environmental or other issues/concerns within the scope of this project.

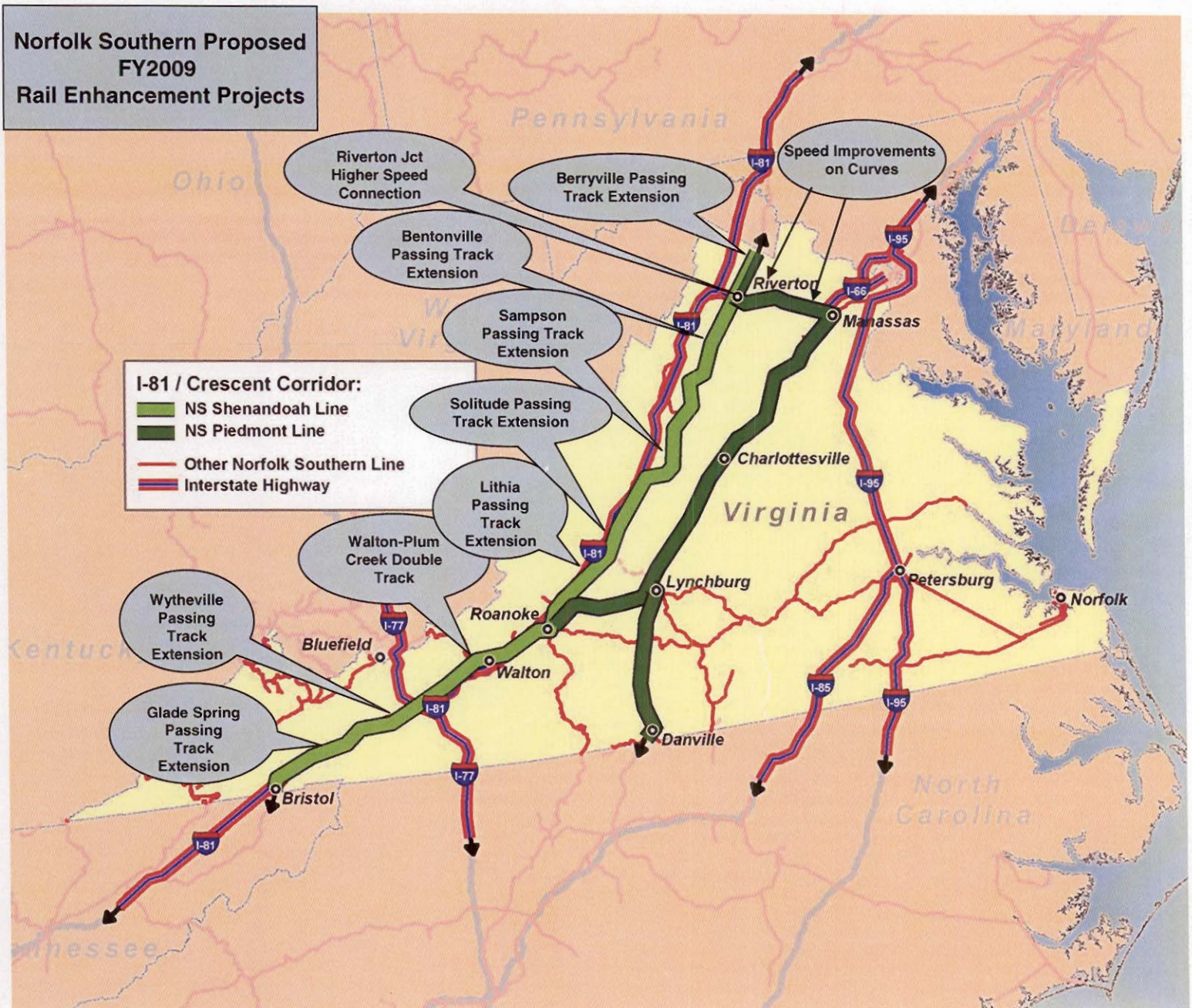
Overall environmental effects are expected to be beneficial as rail freight is considerably more fuel efficient and less polluting than truck freight.

There are no known environmental issues or concerns at this time.

Added Capacity to Rail Corridor (Additional Railcars or Passengers)

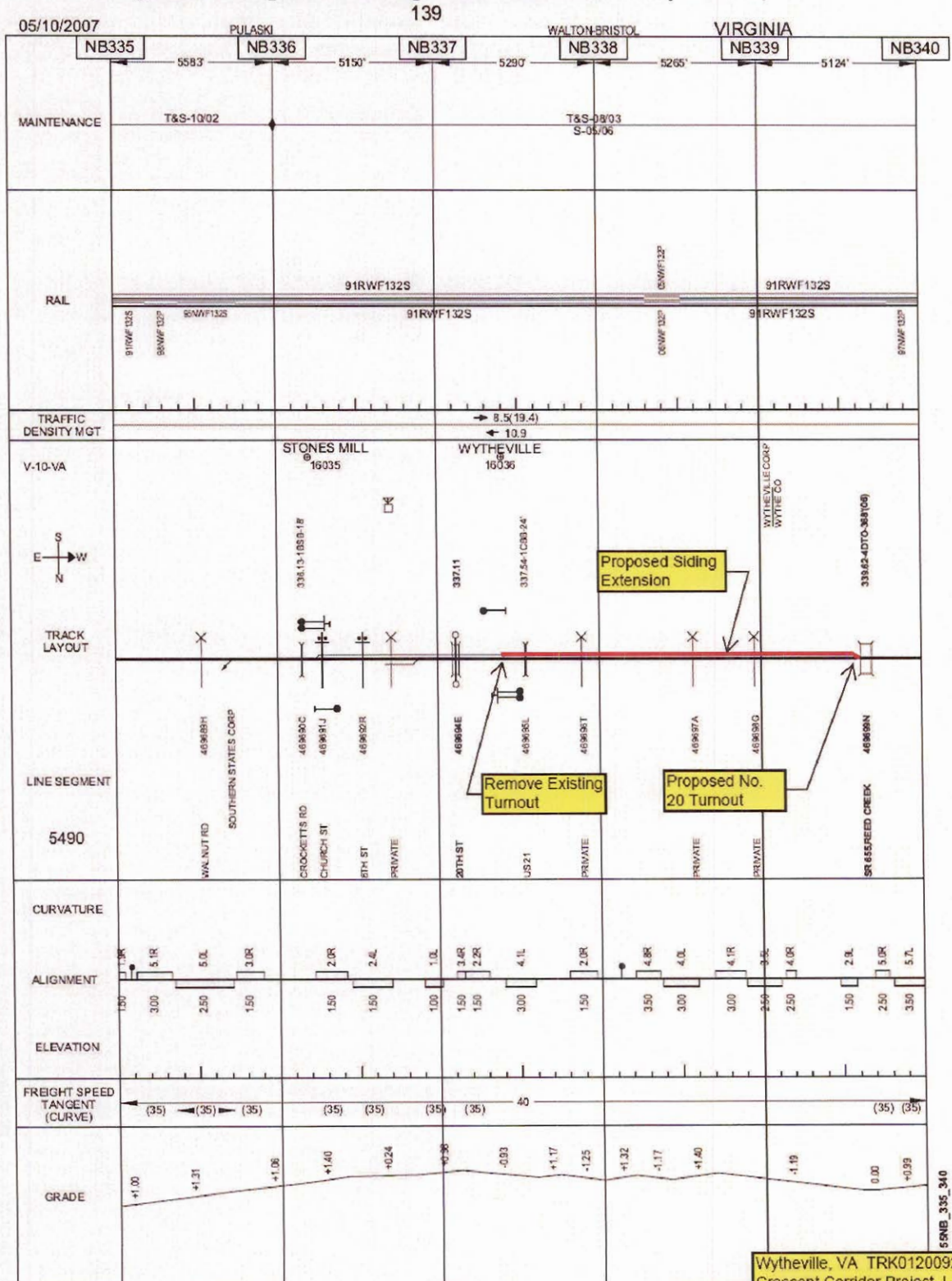
When viewed in isolation, the expanded passing track at Wytheville will reduce 4 hours aggregate train delay. When combined with the other passing track extension and double track projects proposed between Hagerstown and Bristol described elsewhere in this Application, the aggregate train delay is reduced by approximately 45 hours per day. Reducing this delay will allow faster turn times for assets such as locomotives, crews and freight cars. When combined with other planned or proposed projects, the synergies will enable additional train starts and increased throughput on this north-south corridor.

Project Map



Appendix 3 – Details of FY2009 Projects

Diagram of Proposed Passing Track Extension – Wytheville, VA



Lithia Passing Track Extension

Project Location: Lithia, Botetourt County, VA, on Norfolk Southern's Riverton-Roanoke main line. Project limits: mp H216.9 – H219.3

Owner of Property/Right of Way: Norfolk Southern Railway Company

Responsible Party for Continuous Maintenance of Project: Norfolk Southern Railway Company

Project Information:

Description of Project:

Lithia is located between Riverton and Roanoke, VA on Norfolk Southern's main artery between the Northeast and Tennessee. This line is a secondary main line today but will become a major component of the I-81 Crescent Corridor for premium intermodal traffic between the Northeast and two major Tennessee markets. This route is cleared for double stack container traffic and parallels Interstate 81.

The Riverton-Roanoke line is a single track main line, governed by signaled traffic control, with short (less than 8000') passing tracks about every ten miles. Trains pass or overtake each other at passing tracks. This project would upgrade the existing 6,322-foot passing track at Lithia to accommodate longer trains at higher speeds.

Longer passing tracks are badly needed between Shenandoah and Roanoke, about 130 miles. In that distance, there is only one place where long trains can meet or pass: Loch Laird passing track, 8061' long, which is 50 miles north of Roanoke and 80 miles south of Shenandoah.

At present, trains using the passing track at Lithia are limited to 10 mph. Further, the passing track is only 6,322 feet long. Most of the 14-18 trains/day operating between Roanoke and Shenandoah are too long to fit into the passing track. NS proposes to replace 10% of the crossties in, and to surface, the existing passing track; to replace existing #12 turnouts with #20 turnouts; and to construct 6,200 feet of new track to enlarge the passing track to a total length of 12,500 feet. After completion, any train operating between Roanoke and Riverton will be able to meet or pass any other train at Lithia, and trains using the passing track will be able to operate over it at 25 mph or more.

Project Objective:

The overall objective of the project is to increase capacity and to speed up train operations on the Riverton-Roanoke main line. This artery today handles merchandise, coal and grain, and will be an important component of the I-81 Crescent Corridor for

Appendix 3 – Details of FY2009 Projects

premium intermodal traffic between the Northeast and Southwest via Memphis, Tennessee.

The specific objective is to upgrade and extend the passing track at Lithia. NS trains incur an aggregate delay of 4 hours daily because of the inability to utilize fully the passing track at Lithia. Once the passing track is improved, aggregate delay will be 4 hours less than it is today.

Relationship to other projects under development by applicant or previously funded by this program:

This project complements the FY2008 project on the H-line at Front Royal. At present NS is upgrading the Marsh Run-Ashby siding to main line standards and constructing about 3.5 miles of new second main line to create a five mile segment of double track between mp H51.9 – H56.9 in the vicinity of the Virginia Inland Port (see NS's application of 6/13/07 for more detail). By upgrading and extending the Lithia passing track in FY2009 (along with the Berryville, Solitude, Sampson and Bentonville passing tracks described elsewhere in this Application as well as the five miles of double track north of Front Royal), NS will create eight locations between Roanoke and Hagerstown (240 miles) where two contemporary intermodal trains – Crescent Corridor or otherwise – will be able to meet or pass.

Describe the Public Benefit of Project:

Overall public benefits:

- This project, with the other siding extension projects mentioned above, will make possible I-81 Crescent Corridor premium intermodal service. At present, very few locations exist where two 8000' trains can pass each other between Hagerstown and Roanoke. The standard length of an I-81 Crescent Corridor intermodal train will be 8000'.
- By reducing aggregate delay, and by making freight rail more attractive to potential rail users, this project will help to improve air quality, conserve fuel (because of rail's efficiency advantage) and reduce truck traffic
- By increasing capacity, the project enables the rail mode to absorb more growth

Type of Project:

Project is rehabilitation (existing passing track) and new construction (passing track extension) of rail infrastructure. Includes modification to signal and communication equipment (signal upgrading and relocation, and relocation of fiber optic cable).

Application Scope of Work Covers: Entire project

Appendix 3 – Details of FY2009 Projects

Project Budget Summary:

| | |
|--|-------------|
| Preliminary Service, Engineering, or Feasibility Study | \$ 155,884 |
| Environmental Evaluation | \$ 165,942 |
| Design Engineering | \$ 316,798 |
| Right-of-way Acquisition | \$ |
| Construction | \$5,028,541 |
| Construction Management | \$ 467,654 |
| Lease/Acquisition of Equipment | \$ _____ |
| Other (Relocate fiber optic cable) | \$ 502,854 |
| | ===== |
| Total Project Budget | \$6,637,673 |

Rail Enhancement Funds Requested in this Application: \$ 4,646,371(70%)

This request is for capital costs only. NS will assume all ongoing maintenance and operating cost responsibilities and future capital costs.

No provision has been made for crossing closure or grade separation. If Norfolk Southern can successfully negotiate crossing closures as part of the project, the overall project cost may increase but such increase would be funded by Norfolk Southern, thereby increasing NS match to greater than 30%.

Local Match Required by Applicant: \$ 1,991,302 (30%) _____

If Overmatch, Provide Percentage: 0%

1) Match Breakdown by Source (include in-kind)

a. Provider of Local Match Norfolk Southern Railway _____

b. Status (confirmed/anticipated) Confirmed _____

2) Other Funding Sources Beyond Match Requirement

a. Provider of Over Match n/a _____

b. Status (confirmed/anticipated) n/a _____

M. Project implementation schedule (based in months). List major milestones of the project.

| | |
|--------------------------------|------------------|
| Survey and Develop Plans: | 3 Months |
| Acquire Right of Way: | 3 Months |
| Bidding: | 2 Months |
| Permitting: | 2 Months |
| Relocation of Fiber Optic Line | 1 Month |
| Grading: | 4 Months |
| Track work: | 3 Months |
| Total: | 18 Months |

Statement on how this Project promotes or does not preclude Dual/Multi-Access Use:

This project is on Norfolk Southern owned right-of-way on which only Norfolk Southern operates; the rail line will remain an exclusive Norfolk Southern route. There is no proposal to change current operations and allow dual access by another railroad on this track. (The competing north-south route of CSX Transportation, Inc. extends between Alexandria, VA and Rocky Mount, NC [via Richmond, VA].) Project will not preclude future passenger service between Roanoke and Hagerstown.

Project also anticipates intermodal freight growth and will enable service enhancements that will attract domestic truck traffic from many trucking companies.

List additional users of rail line, facility, and/or equipment: trucking companies using intermodal service offered by Norfolk Southern.

Identify any possible Environmental or other issues/concerns within the scope of this project.

Overall environmental effects are expected to be beneficial as rail freight is considerably more fuel efficient and less polluting than truck freight.

There are no known environmental issues or concerns at this time.

Added Capacity to Rail Corridor (Additional Railcars or Passengers)

When viewed in isolation, the expanded passing track at Lithia will reduce 4 hours aggregate train delay. When combined with the projects proposed at Berryville, Solitude, Sampson and Bentonville passing tracks described elsewhere in this Application as well as the five miles of double track north of Front Royal, the aggregate train delay is reduced by approximately 30 hours per day. Reducing this delay will allow faster turn times for assets such as locomotives, crews and freight cars. When combined with other planned or proposed projects, the synergies will enable additional train starts and increased throughput on this north-south corridor.

Project Map

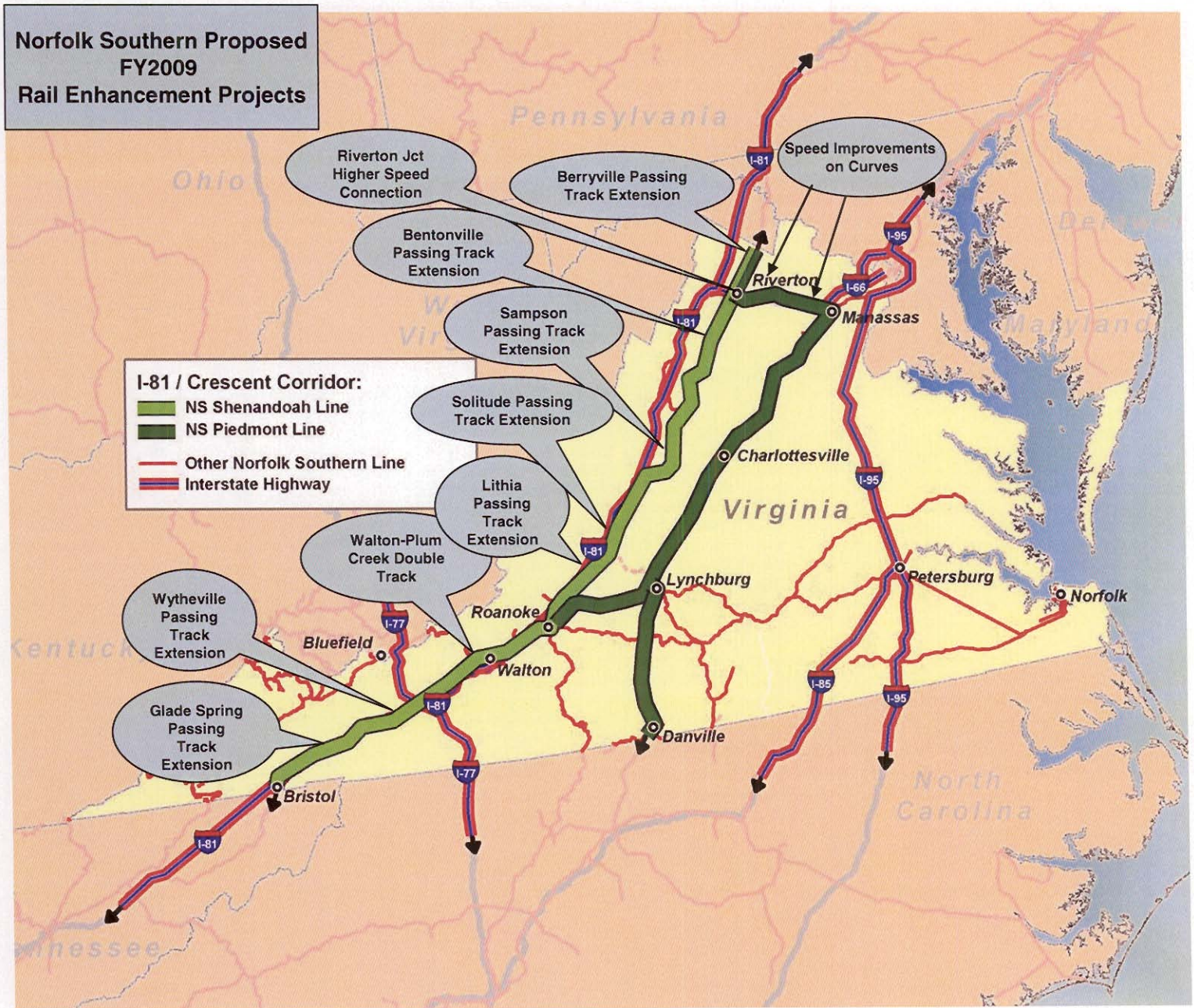
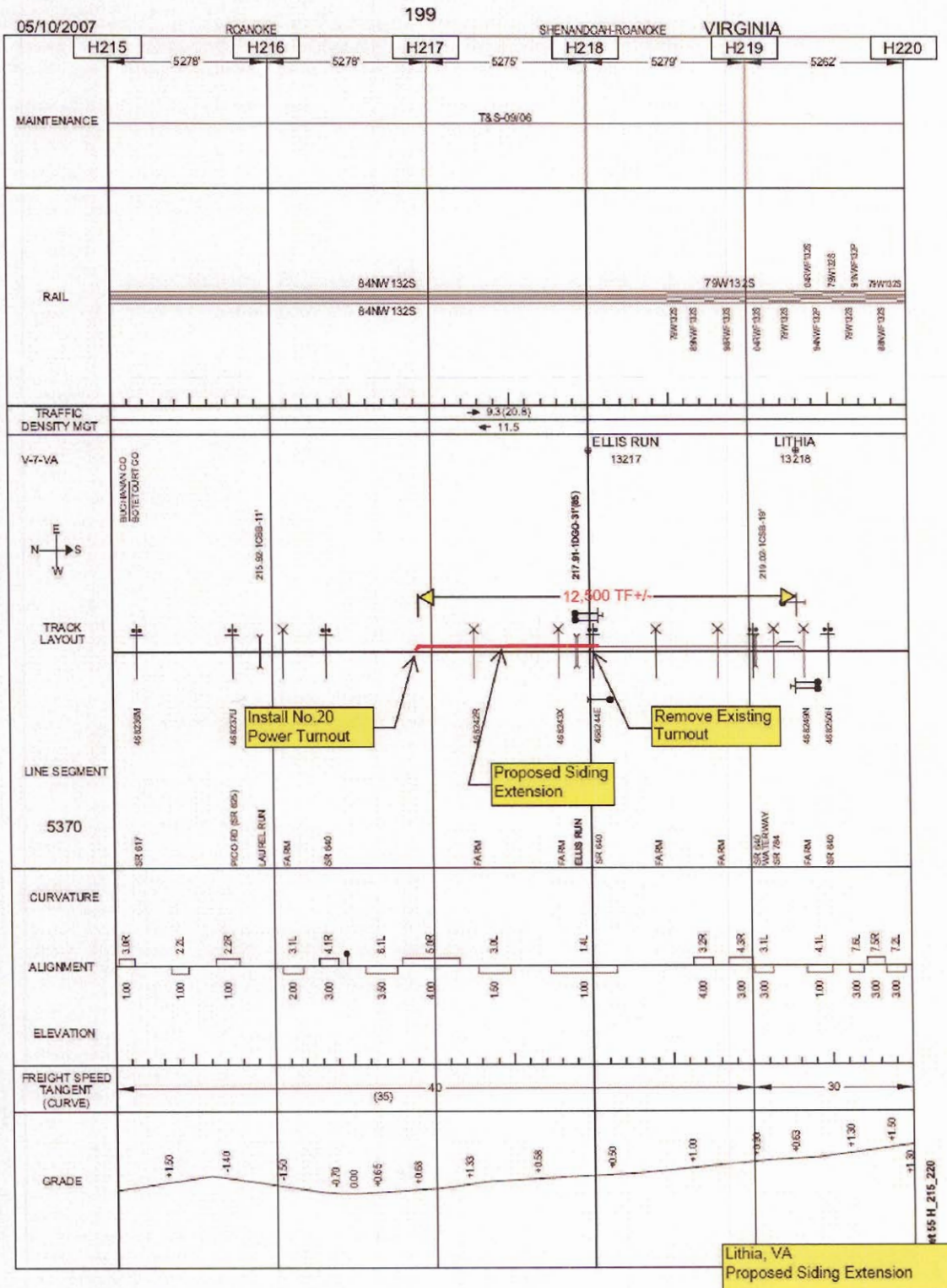


Diagram of Proposed Passing Track Extension – Lithia, VA



Glade Spring Passing Track Extension

Project Location: Glade Spring, Washington County and Glade Spring corporate limits, VA, on Norfolk Southern's Walton-Bristol main line. Project limits: mp NB380.4 – NB382.9

Owner of Property/Right of Way: Norfolk Southern Railway Company

Responsible Party for Continuous Maintenance of Project: Norfolk Southern Railway Company

Project Information:

Description of Project:

Glade Spring is located between Walton and Bristol, VA on Norfolk Southern's main artery between the Northeast and Tennessee. This line is a secondary main line today but will become a major component of the I-81 Crescent Corridor for premium intermodal traffic between the Northeast and two major Tennessee markets. This route is cleared for double stack container traffic and parallels Interstate 81.

The Walton-Bristol line, 107 miles, is a single track main line, governed by signaled traffic control, with short (less than 8000') passing tracks about every fifteen miles. Trains pass or overtake each other at passing tracks. This project would upgrade the existing 5,796-foot passing track at Glade Spring to accommodate longer trains at higher speeds.

Longer passing tracks are needed between Walton and Bristol. In that distance, there is only one passing track more than 8,000 feet in length – at Duncan, approximately midway between Walton and Bristol. Extending the Glade Spring passing track will provide a second meeting point between Walton and Bristol that will be essential before I-81 Crescent Corridor intermodal service can begin.

At present, trains using the passing track at Glade Spring are limited to 10 mph. Further, the passing track is only 5,796 feet long. Most of the 13-15 trains/day operating between Walton and Bristol are too long to fit into the passing track. NS proposes to replace 10% of the cross-ties in, and to surface, the existing passing track; to replace existing #12 turnouts with #20 turnouts; and to construct 7,200 feet of new track to enlarge the passing track to a total length of 13,000 feet. After completion, any train operating between Walton and Bristol will be able to meet or pass any other train at Glade Spring, and trains using the passing track will be able to operate over it at 25 mph or more.

Project Objective:

The overall objective of the project is to increase capacity and to speed up train operations on the Walton-Bristol main line. This artery today handles merchandise, coal

Appendix 3 – Details of FY2009 Projects

and intermodal, and will be an important component of the I-81 Crescent Corridor for premium intermodal traffic between the Northeast and Southwest via Memphis, Tennessee.

The specific objective is to upgrade and extend the passing track at Glade Spring. NS trains incur an aggregate delay of 4 hours daily because of the inability to utilize fully the passing track at Glade Spring. Once the passing track is improved, aggregate delay will be 4 hours less than it is today.

Relationship to other projects under development by applicant or previously funded by this program:

This project complements the FY2008 project on the H-line at Front Royal as well as the five passing track extensions proposed between Roanoke and Hagerstown on the H-line. Together with the Glade Spring and Wytheville passing track projects and construction of double track between Walton and Plum Creek (described elsewhere in this application), NS will create nine new locations between Bristol and Hagerstown (390 miles) where two contemporary intermodal trains – Crescent Corridor or otherwise – will be able to meet or pass.

Describe the Public Benefit of Project:

Overall public benefits:

- This project, with the other siding extension projects mentioned above, will make possible I-81 Crescent Corridor premium intermodal service. At present, very few locations exist where two 8000' trains can pass each other between Hagerstown and Bristol. The standard length of an I-81 Crescent Corridor intermodal train will be 8000'.
- By reducing aggregate delay, and by making freight rail more attractive to potential rail users, this project will help to improve air quality, conserve fuel (because of rail's efficiency advantage) and reduce truck traffic
- By increasing capacity, the project enables the rail mode to absorb more growth

Type of Project:

Project is rehabilitation (existing passing track) and new construction (passing track extension) of rail infrastructure. Includes modification to signal and communication equipment (signal upgrading and relocation, and relocation of fiber optic cable).

Application Scope of Work Covers: Entire project

Appendix 3 – Details of FY2009 Projects

Project Budget Summary:

| | |
|--|-------------|
| Preliminary Service, Engineering, or Feasibility Study | \$ 157,933 |
| Environmental Evaluation | \$ 168,122 |
| Design Engineering | \$ 320,959 |
| Right-of-way Acquisition | \$ |
| Construction | \$5,094,590 |
| Construction Management | \$ 473,796 |
| Lease/Acquisition of Equipment | \$ |
| Other (Relocate fiber optic cable) | \$ 509,458 |
| | ===== |
| Total Project Budget | \$6,724,858 |

Rail Enhancement Funds Requested in this Application: \$ 4,707,401 (70%)

This request is for capital costs only. NS will assume all ongoing maintenance and operating cost responsibilities and future capital costs.

No provision has been made for crossing closure or grade separation. If Norfolk Southern can successfully negotiate crossing closures as part of the project, the overall project cost may increase but such increase would be funded by Norfolk Southern, thereby increasing NS match to greater than 30%.

Local Match Required by Applicant: \$ 2,017,457 (30%)

If Overmatch, Provide Percentage: 0%

1) Match Breakdown by Source (include in-kind)

a. Provider of Local Match Norfolk Southern Railway

b. Status (confirmed/anticipated) Confirmed

2) Other Funding Sources Beyond Match Requirement

a. Provider of Over Match n/a

b. Status (confirmed/anticipated) n/a

Appendix 3 – Details of FY2009 Projects

M. Project implementation schedule (based in months). List major milestones of the project.

| | |
|--------------------------------|------------------|
| Survey and Develop Plans: | 3 Months |
| Acquire Right of Way: | 3 Months |
| Bidding: | 2 Months |
| Permitting: | 2 Months |
| Relocation of Fiber Optic Line | 1 Month |
| Grading: | 4 Months |
| Track work: | 3 Months |
| Total: | 18 Months |

Statement on how this Project promotes or does not preclude Dual/Multi-Access Use:

This project is on Norfolk Southern owned right-of-way on which only Norfolk Southern operates; the rail line will remain an exclusive Norfolk Southern route. There is no proposal to change current operations and allow dual access by another railroad on this track. (The competing north-south route of CSX Transportation, Inc. extends between Alexandria, VA and Rocky Mount, NC [via Richmond, VA].) Project will not preclude future passenger service between Roanoke and Bristol.

Project also anticipates intermodal freight growth and will enable service enhancements that will attract domestic truck traffic from many trucking companies.

List additional users of rail line, facility, and/or equipment: trucking companies using intermodal service offered by Norfolk Southern.

Identify any possible Environmental or other issues/concerns within the scope of this project.

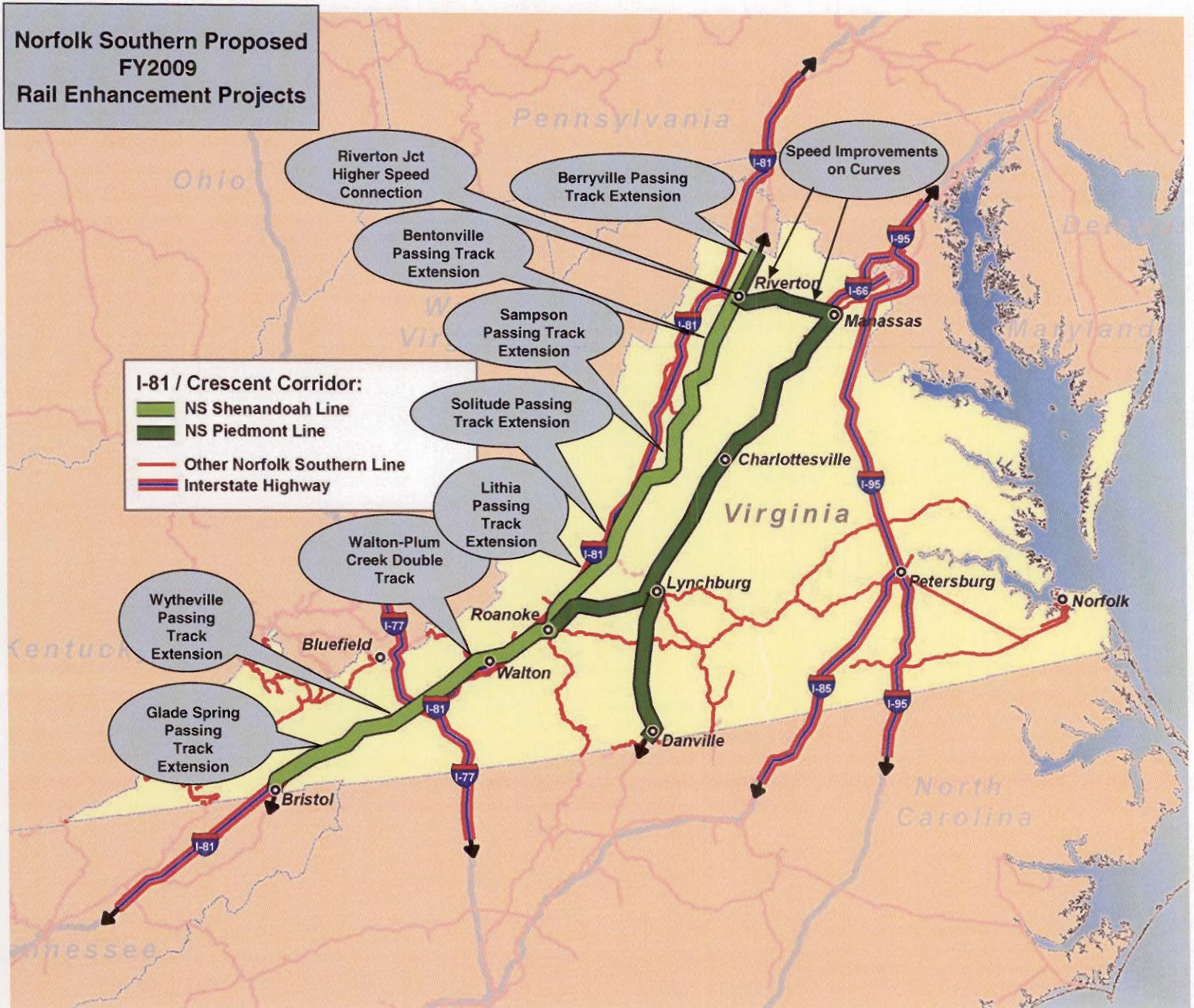
Overall environmental effects are expected to be beneficial as rail freight is considerably more fuel efficient and less polluting than truck freight.

There are no known environmental issues or concerns at this time.

Added Capacity to Rail Corridor (Additional Railcars or Passengers)

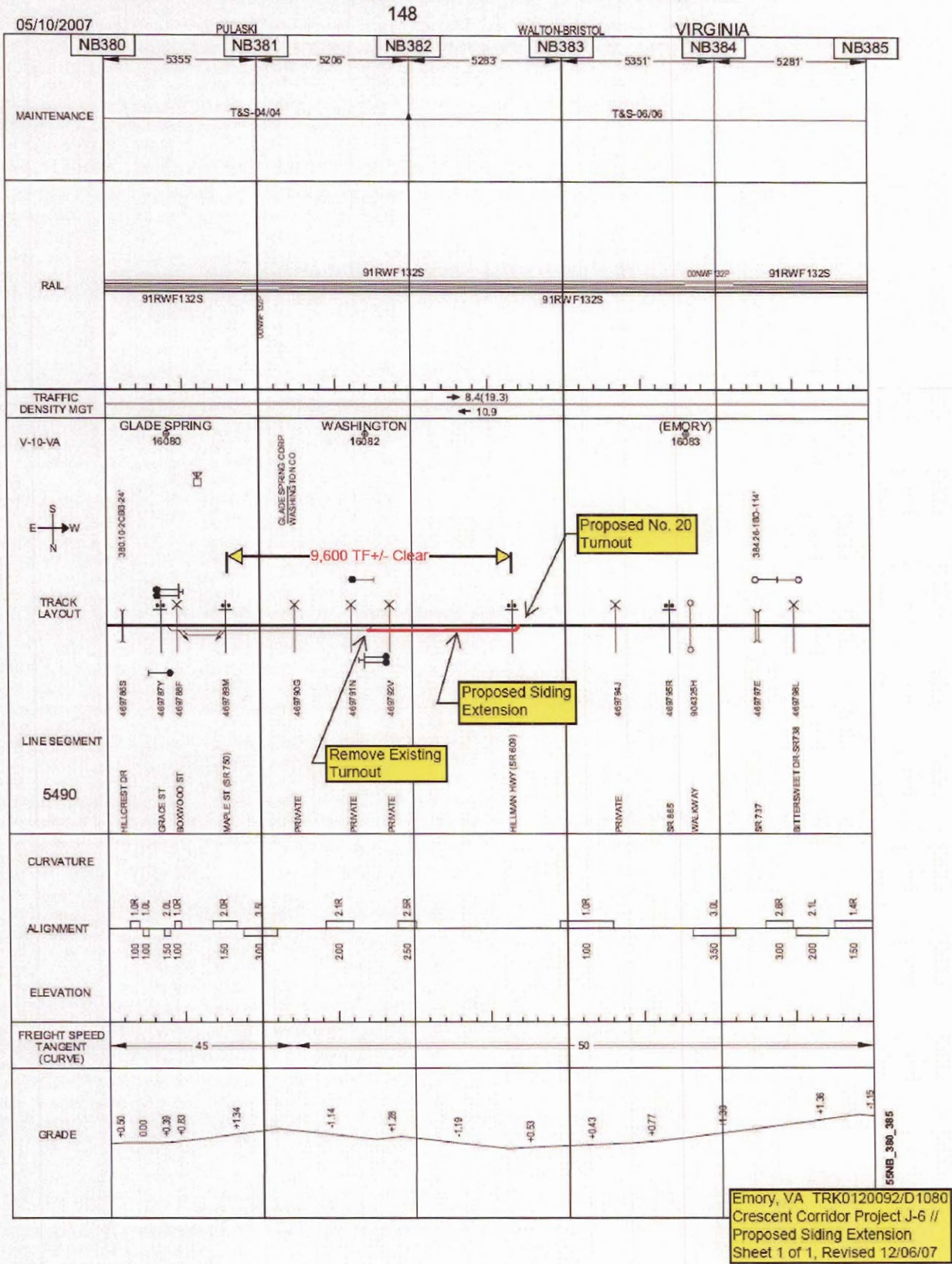
When viewed in isolation, the expanded passing track at Glade Spring will reduce 4 hours aggregate train delay. When combined with the other passing track extension and double track projects proposed between Hagerstown and Bristol described elsewhere in this Application, the aggregate train delay is reduced by approximately 45 hours per day. Reducing this delay will allow faster turn times for assets such as locomotives, crews and freight cars. When combined with other planned or proposed projects, the synergies will enable additional train starts and increased throughput on this north-south corridor.

Project Map



Appendix 3 – Details of FY2009 Projects

Diagram of Proposed Passing Track Extension – Glade Spring, VA



Sampson Passing Track Extension

Project Location: Sampson, Augusta County, VA, on Norfolk Southern's Riverton-Roanoke main line. Project limits: mp H135.0 – H137.2

Owner of Property/Right of Way: Norfolk Southern Railway Company

Responsible Party for Continuous Maintenance of Project: Norfolk Southern Railway Company

Project Information:

Description of Project:

Sampson is located between Riverton and Roanoke, VA on Norfolk Southern's main artery between the Northeast and Tennessee. This line is a secondary main line today but will become a major component of the I-81 Crescent Corridor for premium intermodal traffic between the Northeast and two major Tennessee markets. This route is cleared for double stack container traffic and parallels Interstate 81.

The Riverton-Roanoke line is a single track main line, governed by signaled traffic control, with short (less than 8000') passing tracks about every ten miles. Trains pass or overtake each other at passing tracks. This project would upgrade the existing 5,872-foot passing track at Sampson to accommodate longer trains at higher speeds.

Longer passing tracks are badly needed between Shenandoah and Roanoke, about 130 miles. In that distance, there is only one place where long trains can meet or pass: Loch Laird passing track, 8061' long, which is 50 miles north of Roanoke and 80 miles south of Shenandoah.

At present, trains using the passing track at Sampson are limited to 10 mph. Further, the passing track is only 5,872 feet long. Most of the 14-18 trains/day operating between Roanoke and Shenandoah are too long to fit into the passing track. NS proposes to replace 10% of the crossties in, and to surface, the existing passing track; to replace existing #12 turnouts with #20 turnouts; and to construct 5,800 feet of new track to enlarge the passing track to a total length of 11,600 feet. After completion, any train operating between Roanoke and Riverton will be able to meet or pass any other train at Sampson, and trains using the passing track will be able to operate over it at 25 mph or more.

Project Objective:

The overall objective of the project is to increase capacity and to speed up train operations on the Riverton-Roanoke main line. This artery today handles merchandise, coal and grain, and will be an important component of the I-81 Crescent Corridor for

Appendix 3 – Details of FY2009 Projects

premium intermodal traffic between the Northeast and Southwest via Memphis, Tennessee.

The specific objective is to upgrade and extend the passing track at Sampson. NS trains incur an aggregate delay of 4 hours daily because of the inability to utilize fully the passing track at Sampson. Once the passing track is improved, aggregate delay will be 4 hours less than it is today.

Relationship to other projects under development by applicant or previously funded by this program:

This project complements the FY2008 project on the H-line at Front Royal. At present NS is upgrading the Marsh Run-Ashby siding to main line standards and constructing about 3.5 miles of new second main line to create a five mile segment of double track between mp H51.9 – H56.9 in the vicinity of the Virginia Inland Port (see NS's application of 6/13/07 for more detail). By upgrading and extending the Sampson passing track in FY2009 (along with the Berryville, Solitude, Lithia and Bentonville passing tracks described elsewhere in this Application as well as the five miles of double track north of Front Royal), NS will create eight locations between Roanoke and Hagerstown (240 miles) where two contemporary intermodal trains – Crescent Corridor or otherwise – will be able to meet or pass.

Describe the Public Benefit of Project:

Overall public benefits:

- This project, with the other siding extension projects mentioned above, will make possible I-81 Crescent Corridor premium intermodal service. At present, very few locations exist where two 8000' trains can pass each other between Hagerstown and Roanoke. The standard length of an I-81 Crescent Corridor intermodal train will be 8000'.
- By reducing aggregate delay, and by making freight rail more attractive to potential rail users, this project will help to improve air quality, conserve fuel (because of rail's efficiency advantage) and reduce truck traffic
- By increasing capacity, the project enables the rail mode to absorb more growth

Type of Project:

Project is rehabilitation (existing passing track) and new construction (passing track extension) of rail infrastructure. Includes modification to signal and communication equipment (signal upgrading and relocation, and relocation of fiber optic cable).

Application Scope of Work Covers: Entire project

Appendix 3 – Details of FY2009 Projects

Project Budget Summary:

| | |
|--|-------------|
| Preliminary Service, Engineering, or Feasibility Study | \$ 158,939 |
| Environmental Evaluation | \$ 169,193 |
| Design Engineering | \$ 323,005 |
| Right-of-way Acquisition | \$ |
| Construction | \$5,127,065 |
| Construction Management | \$ 476,817 |
| Lease/Acquisition of Equipment | \$ _____ |
| Other (Relocate fiber optic cable) | \$ 512,707 |
| | ===== |
| Total Project Budget | \$6,767,726 |

Rail Enhancement Funds Requested in this Application: \$ 4,737,408(70%)

This request is for capital costs only. NS will assume all ongoing maintenance and operating cost responsibilities and future capital costs.

No provision has been made for crossing closure or grade separation. If Norfolk Southern can successfully negotiate crossing closures as part of the project, the overall project cost may increase but such increase would be funded by Norfolk Southern, thereby increasing NS match to greater than 30%.

Local Match Required by Applicant: \$ 2,030,318 (30%) _____

If Overmatch, Provide Percentage: 0%

1) Match Breakdown by Source (include in-kind)

- a. Provider of Local Match Norfolk Southern Railway
- b. Status (confirmed/anticipated) Confirmed

2) Other Funding Sources Beyond Match Requirement

- a. Provider of Over Match n/a
- b. Status (confirmed/anticipated) n/a

Appendix 3 – Details of FY2009 Projects

M. Project implementation schedule (based in months). List major milestones of the project.

| | |
|--------------------------------|------------------|
| Survey and Develop Plans: | 3 Months |
| Acquire Right of Way: | 3 Months |
| Bidding: | 2 Months |
| Permitting: | 2 Months |
| Relocation of Fiber Optic Line | 1 Month |
| Grading: | 4 Months |
| Track work: | 3 Months |
| Total: | 18 Months |

Statement on how this Project promotes or does not preclude Dual/Multi-Access Use:

This project is on Norfolk Southern owned right-of-way on which only Norfolk Southern operates; the rail line will remain an exclusive Norfolk Southern route. There is no proposal to change current operations and allow dual access by another railroad on this track. (The competing north-south route of CSX Transportation, Inc. extends between Alexandria, VA and Rocky Mount, NC [via Richmond, VA].) Project will not preclude future passenger service between Roanoke and Hagerstown.

Project also anticipates intermodal freight growth and will enable service enhancements that will attract domestic truck traffic from many trucking companies.

List additional users of rail line, facility, and/or equipment: trucking companies using intermodal service offered by Norfolk Southern.

Identify any possible Environmental or other issues/concerns within the scope of this project.

Overall environmental effects are expected to be beneficial as rail freight is considerably more fuel efficient and less polluting than truck freight.

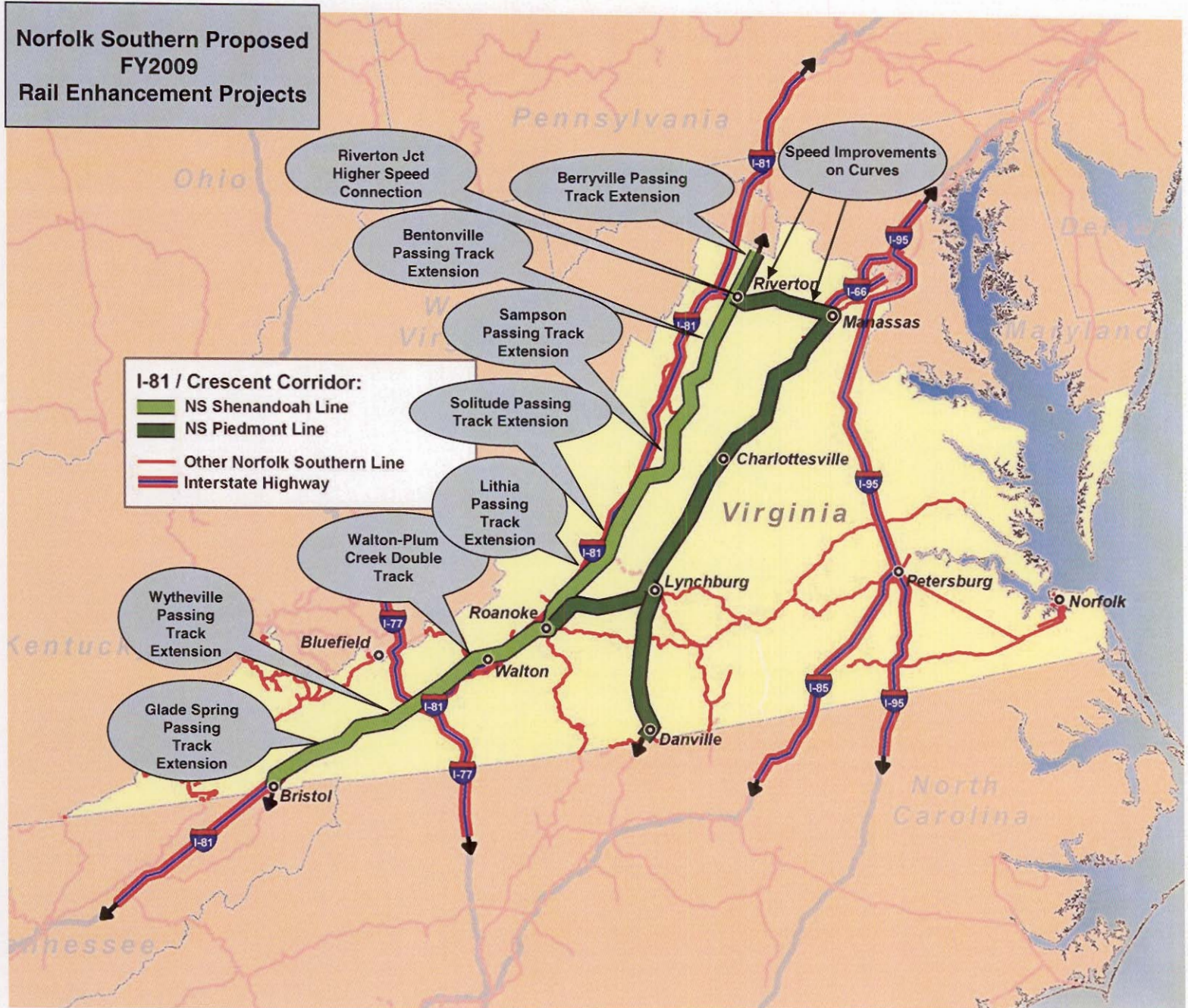
There are no known environmental issues or concerns at this time.

Added Capacity to Rail Corridor (Additional Railcars or Passengers)

When viewed in isolation, the expanded passing track at Sampson will reduce 4 hours aggregate train delay. When combined with the projects proposed at Berryville, Solitude, Lithia and Bentonville passing tracks described elsewhere in this Application as well as the five miles of double track north of Front Royal, the aggregate train delay is reduced by approximately 30 hours per day. Reducing this delay will allow faster turn times for assets such as locomotives, crews and freight cars. When combined with other planned or proposed projects, the synergies will enable additional train starts and increased throughput on this north-south corridor.

Project Map

Norfolk Southern Proposed FY2009 Rail Enhancement Projects





Walton-Plum Creek Double Track Construction

Project Location: Walton-Plum Creek, Montgomery County, VA, on Norfolk Southern's Walton-Bristol main line. Project limits: mp N297.6 – NB299.0

Owner of Property/Right of Way: Norfolk Southern Railway Company

Responsible Party for Continuous Maintenance of Project: Norfolk Southern Railway Company

Project Information:

Description of Project:

Walton-Plum Creek is located between Walton and Bristol, VA on Norfolk Southern's main artery between the Northeast and Tennessee. This line is a secondary main line today but will become a major component of the I-81 Crescent Corridor for premium intermodal traffic between the Northeast and two major Tennessee markets. This route is cleared for double stack container traffic and parallels Interstate 81.

The Walton-Bristol line, 107 miles, is a single track main line, governed by signaled traffic control, with short (less than 8000') passing tracks about every fifteen miles. Trains pass or overtake each other at passing tracks. This project would construct 7,400 feet of second main line track connecting existing double track at Walton with a short segment of double track at Radford, creating 4.5 miles of contiguous double track to accommodate longer trains and to serve as a "queueing lane" for eastbound trains waiting to enter the N-line to Roanoke. The second main line will also alleviate frequent congestion in the vicinity of Radford yard, keeping the railroad more fluid.

More track capacity is needed between Walton and Bristol. In that distance, there is only one passing track more than 8,000 feet in length – at Duncan, approximately midway between Walton and Bristol. Creating 4.5 miles of double track west of Walton will provide an additional meeting point between Walton and Bristol that will be essential before I-81 Crescent Corridor intermodal service can begin.

NS proposes to construct 7,400 feet of new track, install a number 20 power turnout to tie the new second main line into the N-line at Walton, and install two number 15 power turnouts to create a single crossover at mp NB299. After completion, any train operating between Walton and Bristol will be able to meet or pass any other train at Walton-Plum Creek, and trains using the new double track will be able to operate at the existing authorized speed of 35 mph.

Project Objective:

The overall objective of the project is to increase capacity and to speed up train operations on the Walton-Bristol main line. This artery today handles merchandise, coal

Appendix 3 – Details of FY2009 Projects

and intermodal, and will be an important component of the I-81 Crescent Corridor for premium intermodal traffic between the Northeast and Southwest via Memphis, Tennessee.

The specific objective is to create 4.5 miles of double track between Walton and Radford. NS trains incur an aggregate delay of 4 hours daily because of congestion in the Radford area. Once the double track is constructed, aggregate delay will be 4 hours less than it is today.

Relationship to other projects under development by applicant or previously funded by this program:

This project complements the FY2008 double track project on the H-line at Front Royal as well as the five passing track extensions proposed between Roanoke and Hagerstown on the H-line. Together with the Glade Spring and Wytheville passing track projects (described elsewhere in this application), NS will create nine new locations between Bristol and Hagerstown (390 miles) where two contemporary intermodal trains – Crescent Corridor or otherwise – will be able to meet or pass.

Describe the Public Benefit of Project:

Overall public benefits:

- This project, with the other capacity projects mentioned above, will make possible I-81 Crescent Corridor premium intermodal service. At present, very few locations exist where two 8000' trains can pass each other between Hagerstown and Bristol. The standard length of an I-81 Crescent Corridor intermodal train will be 8000'.
- By reducing aggregate delay, and by making freight rail more attractive to potential rail users, this project will help to improve air quality, conserve fuel (because of rail's efficiency advantage) and reduce truck traffic
- By increasing capacity, the project enables the rail mode to absorb more growth

Type of Project:

Project is new construction of rail infrastructure. Includes modification to signal and communication equipment (signal upgrading and relocation, and relocation of fiber optic cable).

Application Scope of Work Covers: Entire project

Appendix 3 – Details of FY2009 Projects

Project Budget Summary:

| | |
|--|-------------|
| Preliminary Service, Engineering, or Feasibility Study | \$ 173,283 |
| Environmental Evaluation | \$ 184,462 |
| Design Engineering | \$ 352,155 |
| Right-of-way Acquisition | \$ |
| Construction | \$5,589,769 |
| Construction Management | \$ 519,849 |
| Lease/Acquisition of Equipment | \$ _____ |
| Other (Relocate fiber optic cable) | \$ 558,977 |
| | ===== |
| Total Project Budget | \$7,378,495 |

Rail Enhancement Funds Requested in this Application: \$ 5,164,947 (70%) _____

This request is for capital costs only. NS will assume all ongoing maintenance and operating cost responsibilities and future capital costs.

No provision has been made for crossing closure or grade separation. If Norfolk Southern can successfully negotiate crossing closures as part of the project, the overall project cost may increase but such increase would be funded by Norfolk Southern, thereby increasing NS match to greater than 30%.

Local Match Required by Applicant: \$ 2,213,548 (30%) _____

If Overmatch, Provide Percentage: 0%

1) Match Breakdown by Source (include in-kind)

- a. Provider of Local Match ~~Norfolk Southern Railway~~ _____
- b. Status (confirmed/anticipated) ~~Confirmed~~ _____

2) Other Funding Sources Beyond Match Requirement

- a. Provider of Over Match ~~n/a~~ _____
- b. Status (confirmed/anticipated) ~~n/a~~ _____

Appendix 3 – Details of FY2009 Projects

M. Project implementation schedule (based in months). List major milestones of the project.

| | |
|--------------------------------|------------------|
| Survey and Develop Plans: | 3 Months |
| Acquire Right of Way: | 3 Months |
| Bidding: | 2 Months |
| Permitting: | 2 Months |
| Relocation of Fiber Optic Line | 1 Month |
| Grading: | 4 Months |
| Track work: | 3 Months |
| Total: | 18 Months |

Statement on how this Project promotes or does not preclude Dual/Multi-Access Use:

This project is on Norfolk Southern owned right-of-way on which only Norfolk Southern operates; the rail line will remain an exclusive Norfolk Southern route. There is no proposal to change current operations and allow dual access by another railroad on this track. (The competing north-south route of CSX Transportation, Inc. extends between Alexandria, VA and Rocky Mount, NC [via Richmond, VA].) Project will not preclude future passenger service between Roanoke and Bristol.

Project also anticipates intermodal freight growth and will enable service enhancements that will attract domestic truck traffic from many trucking companies.

List additional users of rail line, facility, and/or equipment: trucking companies using intermodal service offered by Norfolk Southern.

Identify any possible Environmental or other issues/concerns within the scope of this project.

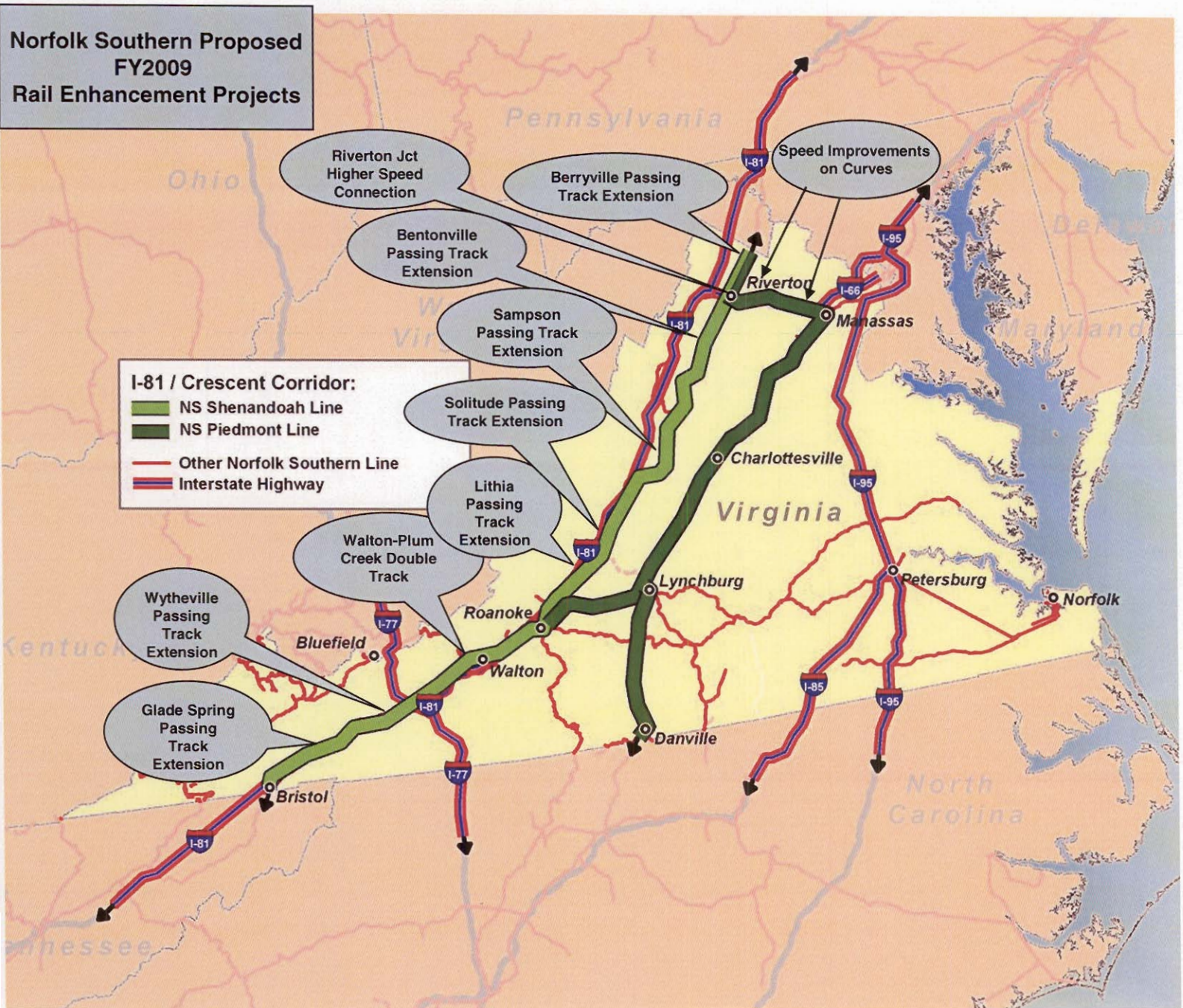
Overall environmental effects are expected to be beneficial as rail freight is considerably more fuel efficient and less polluting than truck freight.

There are no known environmental issues or concerns at this time.

Added Capacity to Rail Corridor (Additional Railcars or Passengers)

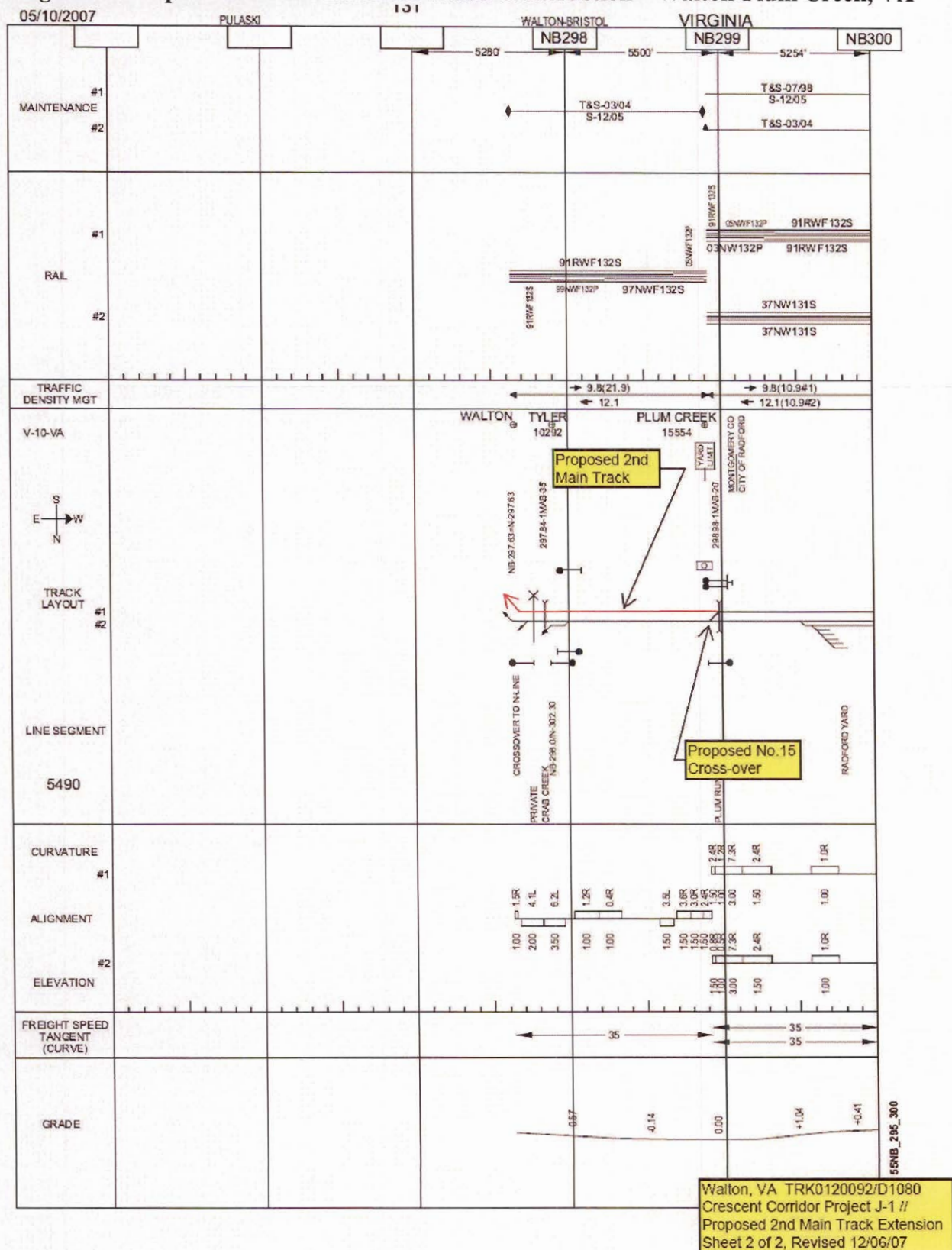
When viewed in isolation, the double track construction between Walton and Plum Creek will reduce 4 hours aggregate train delay. When combined with the other passing track extension and double track projects proposed between Hagerstown and Bristol described elsewhere in this Application, the aggregate train delay is reduced by approximately 45 hours per day. Reducing this delay will allow faster turn times for assets such as locomotives, crews and freight cars. When combined with other planned or proposed projects, the synergies will enable additional train starts and increased throughput on this north-south corridor.

Project Map



Appendix 3 – Details of FY2009 Projects

Diagram of Proposed Second Main Line Track Construction – Walton-Plum Creek, VA



Bentonville Passing Track Extension

Project Location: Bentonville, Warren County, VA, on Norfolk Southern's Riverton-Roanoke main line. Project limits: mp H72.1 – H74.2

Owner of Property/Right of Way: Norfolk Southern Railway Company

Responsible Party for Continuous Maintenance of Project: Norfolk Southern Railway Company

Project Information:

Description of Project:

Bentonville is located between Riverton and Roanoke, VA on Norfolk Southern's main artery between the Northeast and Tennessee. This line is a secondary main line today but will become a major component of the I-81 Crescent Corridor for premium intermodal traffic between the Northeast and two major Tennessee markets. This route is cleared for double stack container traffic and parallels Interstate 81.

The Riverton-Roanoke line is a single track main line, governed by signaled traffic control, with short (less than 8000') passing tracks about every ten miles. Trains pass or overtake each other at passing tracks. This project would upgrade the existing 6,057-foot passing track at Bentonville to accommodate longer trains at higher speeds.

Longer passing tracks are needed between Riverton and Shenandoah, about 50 miles. In that distance, there are no places where long trains can meet or pass. Extending the Bentonville passing track will provide a meeting point between Riverton and Shenandoah that will be essential before I-81 Crescent Corridor intermodal service can begin.

At present, trains using the passing track at Bentonville are limited to 10 mph. Further, the passing track is only 6,057 feet long. Most of the 7-10 trains/day operating between Roanoke and Shenandoah are too long to fit into the passing track. NS proposes to replace 10% of the crossties in, and to surface, the existing passing track; to replace existing #12 turnouts with #20 turnouts; and to construct 5,000 feet of new track to enlarge the passing track to a total length of 11,000 feet. After completion, any train operating between Roanoke and Riverton will be able to meet or pass any other train at Bentonville, and trains using the passing track will be able to operate over it at 25 mph or more.

Project Objective:

The overall objective of the project is to increase capacity and to speed up train operations on the Riverton-Roanoke main line. This artery today handles merchandise, coal and grain, and will be an important component of the I-81 Crescent Corridor for

Appendix 3 – Details of FY2009 Projects

premium intermodal traffic between the Northeast and Southwest via Memphis, Tennessee.

The specific objective is to upgrade and extend the passing track at Bentonville. NS trains incur an aggregate delay of 4 hours daily because of the inability to utilize fully the passing track at Bentonville. Once the passing track is improved, aggregate delay will be 4 hours less than it is today.

Relationship to other projects under development by applicant or previously funded by this program:

This project complements the FY2008 project on the H-line at Front Royal. At present NS is upgrading the Marsh Run-Ashby siding to main line standards and constructing about 3.5 miles of new second main line to create a five mile segment of double track between mp H51.9 – H56.9 in the vicinity of the Virginia Inland Port (see NS's application of 6/13/07 for more detail). By upgrading and extending the Bentonville passing track in FY2009 (along with the Berryville, Solitude, Lithia and Sampson passing tracks described elsewhere in this Application as well as the five miles of double track north of Front Royal), NS will create eight locations between Roanoke and Hagerstown (240 miles) where two contemporary intermodal trains – Crescent Corridor or otherwise – will be able to meet or pass.

Describe the Public Benefit of Project:

Overall public benefits:

- This project, with the other siding extension projects mentioned above, will make possible I-81 Crescent Corridor premium intermodal service. At present, very few locations exist where two 8000' trains can pass each other between Hagerstown and Roanoke. The standard length of an I-81 Crescent Corridor intermodal train will be 8000'.
- By reducing aggregate delay, and by making freight rail more attractive to potential rail users, this project will help to improve air quality, conserve fuel (because of rail's efficiency advantage) and reduce truck traffic
- By increasing capacity, the project enables the rail mode to absorb more growth

Type of Project:

Project is rehabilitation (existing passing track) and new construction (passing track extension) of rail infrastructure. Includes modification to signal and communication equipment (signal upgrading and relocation, and relocation of fiber optic cable).

Application Scope of Work Covers: Entire project

Appendix 3 – Details of FY2009 Projects

Project Budget Summary:

| | |
|--|-------------|
| Preliminary Service, Engineering, or Feasibility Study | \$ 116,846 |
| Environmental Evaluation | \$ 124,385 |
| Design Engineering | \$ 237,463 |
| Right-of-way Acquisition | \$ |
| Construction | \$3,769,242 |
| Construction Management | \$ 350,539 |
| Lease/Acquisition of Equipment | \$ |
| Other (Relocate fiber optic cable) | \$ 376,925 |
| | ===== |
| Total Project Budget | \$4,975,400 |

Rail Enhancement Funds Requested in this Application: \$ 3,482,780 (70%)

This request is for capital costs only. NS will assume all ongoing maintenance and operating cost responsibilities and future capital costs.

No provision has been made for crossing closure or grade separation. If Norfolk Southern can successfully negotiate crossing closures as part of the project, the overall project cost may increase but such increase would be funded by Norfolk Southern, thereby increasing NS match to greater than 30%.

Local Match Required by Applicant: \$ 1,492,620 (30%)

If Overmatch, Provide Percentage: 0%

1) Match Breakdown by Source (include in-kind)

- a. Provider of Local Match Norfolk Southern Railway
- b. Status (confirmed/anticipated) Confirmed

2) Other Funding Sources Beyond Match Requirement

- a. Provider of Over Match n/a
- b. Status (confirmed/anticipated) n/a

Appendix 3 – Details of FY2009 Projects

M. Project implementation schedule (based in months). List major milestones of the project.

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| Track work: | 3 Months |
| Total: | 18 Months |

Statement on how this Project promotes or does not preclude Dual/Multi-Access Use:

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Project also anticipates intermodal freight growth and will enable service enhancements that will attract domestic truck traffic from many trucking companies.

List additional users of rail line, facility, and/or equipment: trucking companies using intermodal service offered by Norfolk Southern.

Identify any possible Environmental or other issues/concerns within the scope of this project.

Overall environmental effects are expected to be beneficial as rail freight is considerably more fuel efficient and less polluting than truck freight.

There are no known environmental issues or concerns at this time.

Added Capacity to Rail Corridor (Additional Railcars or Passengers)

When viewed in isolation, the expanded passing track at Bentonville will reduce 4 hours aggregate train delay. When combined with the projects proposed at Berryville, Solitude, Lithia and Sampson passing tracks described elsewhere in this Application as well as the five miles of double track north of Front Royal, the aggregate train delay is reduced by approximately 30 hours per day. Reducing this delay will allow faster turn times for assets such as locomotives, crews and freight cars. When combined with other planned or proposed projects, the synergies will enable additional train starts and increased throughput on this north-south corridor.

Project Map

